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Hallerste
OPX

OBSERVATIONES ASTRONOMICÆ

ab Anno 1717 ad Annum 1752

PEKINI SINARUM FACTÆ

ET AB

AUGUSTINO HALLERSTEIN,

PEKINI SINARUM TRIBUNALIS MATHEMATICI PRÆSIDE ET MANDARINO COLLECTÆ

ATQUE

OPERIS EDITIONEM AD FIDEM AUTOGRAPHI MANUSCRIPTI

CURANTE

MAXIMILIANO HELL,

ASTRONOMO CÆSAREO-REGIO UNIVERSITATIS VINDOBONENSIS.



ASTOR LIBRARY NEW-YORK

VINDOBONAE,

TYPIS JOANNIS THOMÆ NOB. DE TRATTNERN, SAC. CÆS. REG. AULÆ TYPOGR. ET BIBLIOP.

M. DCC. LXVIII.

MAXIMILIANUS HELL,
ASTRONOMUS CÆSAREO-REGIUS UNIVERSITATIS VINDOBONENSIS

LECTORI ASTRONOMO
S. P. D.

Obſervationes, *quas Tibi ſiſto*, *Aſtronomicas*, *Collectionem puta ſudore multo*, *vigiliis plurimis*, *induſtria*, *&* *labore maximo per annos ipſos XXXVI. continuos a Viris præſtantiſſimis ac doctiſſimis* PEREYRA, KÖGLERO, HALLERSTEINIO, SLAVICSEKJO &c. *Pekini Sinarum comparatam*, *diligentia autem ſingulari Viri in Aſtronomia ſummi* AUGUSTINI HALLERSTEIN *e Provincia Auſtriæ Pekini Tribunalis Mathematici Præſidis & Mandarini manu propria accuratiſſime deſcriptam*, *& Provinciæ noſtræ Auſtriæ*, *tanquam veteris ſui erga hanc Provinciam amoris teſtimonium*, *& Studii Aſtronomici*, *cujus in hac Provincia*

præclara jecerat fundamenta, tributum ex Oriente tranſmiſſum.

Annus agebatur 1760, quo HALLERSTEINIUS *noſter, datis ad Patrem* RITTERUM *noſtrum Pekino litteris, animum ſuum aperuerat de mittenda hac ſua manuſcripta collectione, Typis, ſi ita videretur, exprimenda Vindobonenſibus. Re itaque mecum colluta, curam, operamque meam addixi lubentiſſime; neque enim mihi quidquam evenire poterat optatius, quam tanto Theſauro huсuſque maxima ex parte Aſtronomis ignoto, orbem ditare aſtronomicum; ſexennio tamen opus erat, quo e tam longinquis Sinarum oris per Petropolim Moſchoviæ ad nos perferretur; exeunte demum anno 1765 ad ſuperiores meos perlatum & ab his in manus meas traditum eſt manuſcriptum; itaque ſine mora negotium ſuſcepi; primum quidem, ut exemplar ex Autographo alterum deſcriberetur nitide; dein, ut Typis Trattnerianis elegantiſſimis lucem videret publicam.*

Ut autem opus hoc ab erroribus Typi quam emendatiſſimum ederetur, ipſuſmet magna ſane cura, patientia & temporis impendio Typos omnes ad ipſum Autographum manuſcriptum diligenter exegi, formam operis, Typoſque litterarum in eum, quem coram cernis, præſcripſi modum. Operis autem totius diviſionem in binas partes & ipſus HALLERSTEINIUS *voluit, & ipſa obſervationum ratio poſtulare videbatur; quæ enim prima continentur parte, eæ ob organorum penuriam, & obſervandi methodum minorem habent accurationem, quam quæ ſecunda; quod ipſum jam candide monuit*

HALLERSTEINIUS; *Neque tamen has inutiles arbitraberis, qui noſti, rudiores etiam antiquorum Aſtronomorum obſervationes poſt annorum centurias aliquot, vim obtinere accurationis: errorem ſcilicet, etiam majuſculum, ſed in mille diſtributum revolutiones, evadere omnino inſenſibilem, atque adeo aptas, quibuſcum cateræ longiore annorum intervallo diſtantes comparentur obſervationes.*

Reliqua, quæ Te noſſe oporteat, ab ipſo HALLERSTEINIO *in hoc opere ſuis locis diligenter notata reperies. Autographum autem ipſum manu propria Clariſſimi* HALLERSTEINII *elegantiſſime, & accuratiſſime conſcriptum in Bibliotheca Collegii Academici Societatis JESU Vindobonæ repoſitum hodie adſervatur diligentiſſime; id eo monuiſſe volui, ut, ſi de fide obſervationis cujuſpiam typis datæ dubites, ex Autographo ipſo certior fieri poſſis; Vale, & operam meam, in Rempublicam a me lubentiſſime collatam, boni conſule.*

Dabam Vindobonæ ex Obſervatorio
Cæſareo-Regio Univerſitatis.
VII. KAL. APRIL. ANNO M. DCC. LXVIII.

LECTOR BENEVOLE.

Obſervationes aſtronomicæ, quas in fronte legis, ne majus aliquid expectes, tales ſunt, quales pro ratione muneris hic noſtri faciendæ: per otium, quod a. ſanctioribus curis & pro hac organorum penuria fieri potuere; non ab hominibus, qui ætatem omnem in hoc ſtudio egerint, aut hoc demum agant, imo qui omnibus omnia fieri volentes, dum hóc agere fortaſſe videntur, omnia agant ad majorem Dei gloriam.

Damus porro obſervationes iſtas qualeſcunque, non quod eas Aſtronomiæ in tanta hodie luce conſtitutæ multum lucis allaturas putaremus, ſed ne, quo fato periverunt aliæ, ut eſt rerum iſthic noſtrarum Conditio inſtabilis demum, perirent etiam iſtæ, quas tamen intelligentibus in Europa viris probatas alias, alias etiam expetitas intelleximus; Harum merito etiam, an ſola illorum humanitate, tute lector arbitrabere.

Certe ab organorum copia, aut Obſervatorii apparatu nihil eſt, quod illas commendemus, quibus area domus Obſervatorium: Micrometrum, Pendulum, quadrans unus bipedalis cum aliquot Teleſcopiis tota ſuppellex. Nam quæ in Obſervatorio Regio machinæ, ut uſui etiam interdum eſſe poſſint, & ad noſtram quoque curam pertineant, longius abſunt, & machinæ demum ſunt, non tam ad accurationem hodiernæ Aſtronomiæ, quam ad Majeſtatem.

In duas partes Obſervationum feriem dividimus: Prior complectitur eas, quas ab anno 1717 ad annum 1746 fecit P. Ignatius Kögler anteceſſor meus; Poſterior meas. Utebatur is Pendulo & Micrometro hic loci fabrefactis, opere mediocri ſcilicet: Micrometrum affixum habebat tubo $3\frac{1}{2}$ pedum conſtans filo horario & duobus parallelis, quæ cochlea conſtringebantur & diducebantur; Pendulum exigebat ad triangulum filare ferreum, amplum, exacte in Meridiano conſtitutum; atque ut erat viſu admodum acuto, ſatis tute, & accurate organorum defectum diligentia compenſante. Teleſcopia denique habebat variæ formæ, & ſuis aliqua reticulis inſtructa.

Eclipſes Solis & Lunæ pleraſque omnes obſervavit in Obſervatorio Publico, ubi tempora exiguntur, vel ad horologia manualia rotata, vel ad armillam æquatoriam 6 pedum in diametro, vel ad magnum ſciatericum, & in armilla diſtingui poſſunt etiam partes minuti primi. Has autem Eclipſes, peculiari libello nitide adnotatas, reliquit,

unde eas huc deſcripſimus. Alias Obſervationes in libris Ephemeridum Sinicarum, qui quotannis prodeunt, inſertis ad eum finem albis foliis, ordine dierum adnotabat, inde digeſſimus, quas hic damus in Priore Parte, quaſque ita digerere placuit, ut uno intuitu appareret, quid in quovis genere obſervatum ſit potius, quam quid quovis tempore. Vidimus quidem Obſervationes illius aliquas ſparſim impreſſas, ſed tam parum feliciter, ut etiam Solis Eclipſes in Eclipſes Lunæ transformatæ fuerint, & neceſſarium fiat, quot ſuperfluum videre poterat.

Porro dum hæ Obſervationes tranſcriberentur, & ordinarentur, fiebant a me aliæ, quas primum appendicis loco prioribus adjicere viſum, ſed creſcente earum numero, alteram hujus operis partem impleverunt. De hujuſmodi Obſervationum accuratione denique, aut uſu tute Lector puta; vale, vive, fave.

Dabam Pekini Sinarum Anno Xti 1754.

AUGUSTINUS HALLERSTEIN.

OBSERVATIONUM PEKINENSIUM PARS PRIOR

Ab Anno 1717. ad Annum 1745.

CAPUT I.

ECLIPSES SOLIS ET LUNAE.

Eclipſis Lunæ d. 21. Sept. 1717.

Cam. Hi. a. 56. l. 8.

Poſt mediam noctem.

Tempus verum.

0^h	25'	Initium e regione Schikardi, qua Vietam ſpectat.
0	30	Umbra attigit Schikardum.
0	34	— — Chriſtmannum.

0^h	36′	Umbra attigit Mare humorum & Scheinerum.
0	43	— — Tychonem ac Gaſſendum.
0	47	— — Grimaldum.
0	49	— — Ricciolum & Stoeflerinum.
0	50	— — Bullialdum.
0	54	— — Hevelium, & Regiomontanum.
1	5	— — Landspergium
1	8	— — Cavalerium & Ptolomæum.
1	14	— — Galilæum, Keplerum, Hipparchum & S. Cyrillum.
1	17	— — Littus Auſtrale ſinus æſtuum.
1	27	— — Copernicum & Langrenium.
1	40	Emerſerunt Cavalerius Galilæus, & Reinerius.
1	43	Umbra attigit Manilium & Paludem ſomni.
1	49	— — Menelaum, Plinium, & mare Criſium.
1	54	Proclum, emerſis ſimul Hevelio & Keplero.
1	57	Emerſerunt Copernicus & Ricciolus.
2	1	— — Grimaldus.
2	8	— — Sirſalis & Manilius.
2	10	— — Crugerus & Menelaus.
2	22	— — Merſennus & Gaſſendus.
2	32	— — Mare humorum & Bullialdus.
2	34	— — Chriſtmannus.
2	35	— — Schikardus, Munoſius & Profatius.
2	41	— — Palus Somni.
2	43	— — Schillerus.
2	46	— — Promontorium boreum terræ Mannæ.
2	49	— — Cenſorinus, ac centrum Tychonis.
2	50	— — Mare Criſium & Tycho totus.
2	54	— — Sacro Boſco, & Clavius.

2^h	55′	Emerſerunt	S. Cyrillus.
2	57	— —	S. Catharina.
3	2	— —	Fracaſtorius.
3	6	— —	Langrenius.
3	12	— —	Petavius.
3	16	— —	Finis prope Furnerium.

Quantitas maximæ obſcurationis Micrometro dimenſa erat 6 dig. 22 min. Sinicorum, diviſa ſcilicet diametro Lunæ in 10 dig. & digito in 60. min.

Cœlum initio Eclipſis valde ſerenum, ab hora autem 1ma ad 2^{dam} multis turbatum nubibus, quæ aliquoties lunam aſpectui ſurripuerunt, deinde rurſus ad finem uſque ſereniſſimum cœlum.

Horologium correctum fuit tum ad Solem, tum examinatum ex culminatione Stellæ Fomahant, ipſius Lunæ, ac lucidæ in cauda Ceti.

	Med. Ecl.		Duratio.		Quant.	
Ex obſervatione	1^h 50′ 30″	—	2^h 51′ 0″	—	6^d 22′	Sinic.
Ex tabul. de la Hire.	1 40 34	—	2 48 36	—	5 50	
Flamſtedii	1 37 18	—	2 53 24	—	6 18	
Ex Eph. Manfredii	1 51 0	—	2 51 0	—	5 58	

Norimbergæ a D. Wurzelbaur obſervatus finis hujus Eclipſis d. 20 Sept. h. 8 11′ poſt merid. unde prodit Norimberga Occidentalior Pekino 7^h 5′.

Item Pariſiis obſervatus finis d. 20 Sept. hor. 7 35′ poſt mer. inde differentia meridianorum 7^h 41′ juſto major. 3′ aut 4′ Ex aliis Phaſibus utrobique annotatis colligitur differentia 7^h. 38′ proximor veræ.

Grenovici D. Flamſtedius obſervavit finem hujus Eclipſis d. 9 Sept. St. vet. h. 7 21′ 41″ unde Grenovicum occidentalius Pekino. h. 7 54′ 19″ cum reipſa non ſit occidentalius quam h. 7 46′ 0″.

Luna verſabatur in 1mo Anomaliæ quadrante ultra medium ſeu prope ⅓ & accedebat ad Nodum auſtralem. Locus verus Lunæ in ♓ 27° 34′ & Sol. in ♍.

Eclipſis Lunæ totalis d. 16 Martii, 1718.

Cam̃. Hi. a. 57 l. 2.

Poſt meridiem.

Circa initium Eclipſis cœlum denſis valde vaporibus oppletum erat, ita ut ægre Luna, nullaque macula diſcerni poſſet. Circa 9^h 30′ culminante corde Hydræ, tenuis fuligo ac penumbra notari cœpit, quæ ſucceſſive accrevit, non tamen ea obſcuritate, qua alias ſolet. Unde factum, ut etiam initium Eclipſis uno ſemiminuto tardius animadverſum ſit, quod tamen ex cæteris Phaſibus præciſius correctum fuit, ut ſequitur. Diſſipatis paulo poſt vaporibus ab hora 10 ad finem uſque cœlum conſtanter ſerenum perſtitit.

Tempore vero.

9^h	47′	7″	Initium Eclipſis prope Cavalerium.
9	58	30	Umbra attigit Gaſſendum.
10	2	0	— — Morinum.
10	5	—	— — Copernicum.
10	6	15	— — Bullialdum & Sinum Iridum.
10	10	0	— — Profatium.
10	10	30	— — Eratoſthenem.
10	11	0	— — Timocharidem & Sinum æſtuum.

10^h	12′	45″	Umbra	attigit	Tychonem.
10	14	40	—	—	Platonem tecta toto Tychone.
10	15	15	—	—	Umbra tranſivit centrum Lunæ.
10	19	0	—	—	attigit Manilium.
10	23	30	—	—	Menelaum, Ariſtotelem, & Eudoxum.
10	26	50	—	—	S. Catharinam.
10	28	30	—	—	S. Theophilum.
10	29	40	—	—	Poſſidonium, Cenſorinum & Exiguum.
10	31	40	—	—	Endymionem & Atlantem.
10	33	0	—	—	Paludem Somni.
10	35	10	—	—	Proclum, & Stevinum.
10	36	45	—	—	Mercurium, Mare Criſium, & Petavium.
10	39	15	—	—	Langrenium.
10	41	0	Obtexit totum mare Criſium.		
10	43	25	Immerſio totalis & ceſſatio lucis ad Firmicum.		

Exinde uſque ad horam 11 permanſit pallor aliquis ſublucidus ad occaſum boreum diſci Lunæ, tandemque tota ferrugineo colore ſuffuſa candentis inſtar ferri apparuit conſtanter, fuſcior tamen aliquanto verſus ortum auſtralem. Circa mediam 12^{mam} ſatis æquabiliter ferrugo officiebat lunam, niſi quod ex parte auſtrali paulo dilutior videretur. Succeſſive autem dilutior color ad orientales, & fuſcior ad occiduas diſci partes tranſiit. Poſt mediam noctem minuto fere 2do culminavit luna in tranſitu meridiani inſumens 2′ 20″ proxime. Quadrante poſt tenuis albor limbum lunæ orientalem ſubintrare cœpit, & poſt mediam noctem

0^h	23′	22″	Emerſio lunæ ex umbra & prima apparitio lucis prope Nodum orientalem.
0	26	30	Emerſere ex umbra Grimaldus.
0	30	20	— — Ariſtarchus.
0	35	0	— — Sinus roris & Inſula ventorum.
0	37	30	— — Landſpergius, & Sinus Iridum.
0	39	0	— — Reinholdus.
0	41	10	— — Copernicus.
0	43	20	— — Plato & Bullialdus.
0	45	30	— — Eratoſthenes & litus ort. Sinus æſtuum.
0	47	15	— — Archimedes & initium Tychonis.
0	49	0	— — Tycho totus.
0	52	0	— — Sinus æſtuum totus.
0	55	0	— — Manilius.
0	58	0	— — Menelaus.
1	1	45	— — Poſſidonius & S. Dionyſius.
1	4	10	— — S. Catharina.
1	5	0	— — S. Cyrillus & Mercurius.
1	5	50	— — S. Theophilus, & Piccolomineus.
1	7	30	— — Cenſorinus & Exiguus.
1	10	30	— — Macrobius & litus ortivum maris cris.
1	12	45	— — Goclenius.
1	15	0	— — Mare Criſium totum.
1	16	10	— — Petavius.
1	17	30	— — Langrenius & Wendelinus.
1	19	40	— Finis excedente umbra prope nodum occidentalem.

	Med. Eclipſ.					Durat. obſc. tot.				Dur. univ. Ecl.		
Ex obſerv.	11ʰ	33′	23″	30‴	—	1ʰ	39′	57″	—	3ʰ	32′	33″
Ex de la Hire.	11	32	13	0	—	1	39	26	—	3	34	32
Ex Flamſt.	11	28	17	0	—	1	37	50	—	3	32	10
Ex Manfred.	11	28	0	0	—	1	41	0	—	3	35	0

Luna verſabatur in 3ᵗⁱᵒ anomaliæ quadrante ante medium. ſeu prope $\frac{1}{3}$ eratque in tranſitu Nodi borei. Locus verus Lunæ in ♍ 25° 44′ & Sol in ♓.

Eclipſis Lunæ totalis, d. 10 Sept. 1718.

Cam. - Hi. a. 57 l. 8.

Poſt mediam noctem.

Cœlo perpetuis nubibus obtecto, nihil obſervari potuit, niſi initium, ut paulo poſt notatur, caſu ſe aperiente aliquo hiatu per paucula minuta, immerſio autem umbræ fuit, proxime Ricciolum.

			Init. Eclipſ.		
Ex obſervatione poſt med. noct.			1ʰ	42′	30″
Ex Tabul. de la Hire	—	—	1	40	15
Ex Tabul. Flamſtedii	—	—	1	43	29
Ex Epher. Manfredii	—	—	1	41	0

Bononiæ D. Manfredi obſervavit initium hujus Eclipſis d. 9 Sept. h. 6 42′ 13″ poſt meridiem:

Unde prodit Bononia Occidentalior Pekino 7ʰ 0′ 17″.

Luna verſabatur in 1ᵐᵒ anomaliæ quadrante, paulo poſt Apogæum, eratque in tranſitu Nodi auſtralis. Locus verus Lunæ in ♓ 16° 40′ & Sol. in ♍.

Eclipſis Solis parva d. 24 Sept. 1718.

Cam. Hi. a 57 l. 8. intercalari.

Poſt meridiem.

Nubes multæ occupabant cœlum, & vix ſpes erat faciendæ alicujus obſervationis; quia tamen apparebant modici hiatus nubium circa occidentem, par erat invigilare, ut aliquid hujus Eclipſidii deprehenderetur. Accidit autem, ut ſequitur.

4^h	59′	30″	Sol per hiatum nubis promicabat immunis adhuc a luna.
5	2	0	Iterum per nubem tranſparens jam modice erat affectus ex parte diſci borea cum exigua declinatione ad occaſum. Mox nube involutus,
5	30	0	latuit, uſque dum præciſe emergens denuo notabilem in vertice defectum oſtendit, ſecundum ocularem æſtimationem unius digiti ſinici. Uno vero aut ſeſqui minuto poſt ope micrometri inventa ſunt 52′ ſcrupula unius digiti deficere. Et nota-
5	50	0	batur defectus jam imminui per ſciſſuram nubis, ultimo proſpectans Sol modiciſſimum defectum oſtendit quam proxime æqualem illi, quem habuit h. 5. 2′ Deinceps nihil ſolis ultra apparuit.

	Init.		*Max. Obſ.*		*Finis*		*Quantitas.*
Ex de la Hire.	5^h 1′	—	5^h 27′	—	5^h 53′	—	1^d 4′
Ex Flamſt.	5 1	—	5 25	—	5 52	—	1^d 0

Luna verſabatur in 3^{tio} Anomaliæ quadrante uno die poſt tranſitum Perigæi, uti & poſt tranſitum Nodi borei.

Locus verus Solis & Lunæ in ♎ 0° 53′.

Ecli-

Eclipſis Solis d. 19 Februarii 1719.

Cam. Hi. a. 58 l. 1.

Poſt meridiem.

Denſi vapores cum nebula cœlum occupabant, potuit tamen aliqua obſervatio fieri, & facta eſt a P. Carolo Slaviczek ope teleſcopii, quod inſtructum erat reticulo in 12 partes more Europæo diviſo, ut ſequitur:

Temp. ver.

2^h	$38'$	$30''$	Initium Eclipſis.
2	45	30	Obſcuratus eſt dig. I ſeu duodecima pars Solis.
3	2	0	— — — III
3	11	0	— — — IV
3	31	0	— — — VI ſeu medius diſcus Solis.

Plura obſervare non conceſſit nebula, quæ tandem omnem aſpectum Solis eripuit.

	Initium.		*Max. Obſcur.*		*Quantitas.*
Ex de la Hire.	$2^h\ 56'\ 43''$	—	$4^h\ 16'\ 56''$	in occ. ☉	$7^d\ 22'$
Ex Flamſted.	2 51 30	—	4 16 30	in occ. ☉	7 45
Ex Manfredi.	3 2 0	—	4 11		

Luna verſabatur in ultimo quadrante Anomaliæ appropinquans Apogæo, & in acceſſu ad Nodum Auſtrinum. Locus verus Solis & Lunæ in ♓ 0° 7′.

	Init.	Maxim. Obſc.	Finis.	Quantitas.	
Ex de la Hire	$10^h\ 37'$ —	$0^h\ 8'$ —	$1^h\ 37'$ —	$7^d\ 0'\ 30''$	Sinic.
Ex Flamſt.	10 34 —	0 7 —	1 38 —	7 18 21	

Luna verſabatur in primo Anomaliæ quadrante ante finem, & in abceſſu a Nodo boreo.

Locus verus ☉ & ☾ in ♌ 11° 48′.

Eclipſis Lunæ d. 13 Jan. 1721.

Cam. Hi. 2. 59 l. 12.

Poſt meridiem.

9^h	12′	Initium Eclipſis.
9	25	Umbra attigit Ariſtarchum.
9	41	— — Mare ſerenitatis.
9	44	— — Copernicum.
9	49	— — Poſſidonium.
9	54	— — Manilium & Ricciolum.
9	55	— — Menelaum & Grimaldum.
10	4	— — Mare criſium, ac centrum Lunæ. Grimaldo toto immerſo.
12	10	Poſt mediam noctem Finis Eclipſis.

Quantitas inumbrationis circa medium Eclipſis Micrometro dimenſa, erat præciſe 6 digit. ſinicorum.

	Med. Eclipſ.	Durat.	Quantitas.
Ex obſervat.	$10^h\ 41'\ 0''$ —	$2^h\ 58'\ 0''$ —	$6^d\ 0'\ 0''$
Ex de la Hire.	10 49 45 —	2 53 28 —	5 57 40
Ex Flamſt.	10 44 3 —	2 52 6 —	5 56 36
Ex Manfr.	10 51 0 —	2 55 0 —	6 7 0

Cantone ſolum obſervatum initium Eclipſis h. 9 o′.

Luna verſabatur in 1mo quadrante Anomaliæ ante medium, & in acceſſu ad Nodum boreum. Locus Lunæ verus erat in ♋ 23° 30′ & Sol. in ♑.

Eclipſis Solis d. 24 Julii 1721.

Cam. Hi. a. 60 l. 6 Intercalari.

Poſt Meridiem.

Ab initio ultra medium Eclipſis ſatis favit Cœlum, commodeque potuit obſervari.

Tempore vero.

5^h	21′	Initium Eclipſis.	
5	30	Luna texit Solis digit.	I
5	40	— — — —	II
5	53	— — — —	III
6	12	— — — —	IV

Poſtrema hæc phaſis inumbrati digiti 4^{ti} cenſeri poterit pro maxima obſcuratione, & medio Eclipſis; nunquam enim ulterius progreſſa eſt, diutius quidem raſit eum digitum umbra, & quaſi in eodem hæſit, ex collato tamen acceſſu, & receſſu momentum medium definitum eſt hor. 6. 12.

Nondum regreſſa fuit umbra uſque ad dig. III cum Sol illapſus nubibus, horizontem occiduum occupantibus, deinceps non amplius apparuit.

	Initium.	*Max. Obſcur.*	*Finis.*	*Quant.*
Ex de la Hire	5^h 20′ —	6^h 7′ —	6^h 58′ —	4^d 0′
Ex Flamſt.	5 17 —	6 $5\frac{1}{2}$ —	6 58 —	4 2

Luna verſabatur in primo Quadrante Anomaliæ in primo Signo, & receſſu a Nodo boreo. Locus verus Solis, & Lunæ in ♌ 1° 13′.

Eclipſis Lunæ totalis d. 2 Jan. 1722.

Cam. Hi. a 60 l. 11.

Poſt Meridiem.

Cœlo ſereniſſimo, ac tranquilliſſimo percommode hæc Eclipſis obſervari potuit.

Temp. ver.

8^h	19′	Initium Eclipſis circa Hevelium.
8	25	Umbra attigit Ariſtarchum.
8	27	— — — Keplerum.
8	29	— — — Mare humorum.
8	32	— — — Pitheam.
8	33	— — — Schillerum.
8	35	— — — Copernicum.
8	40	— — — Timocharim.
8	42	— — — Sinum æſtuum.
8	45	— — — Platonem.
8	47	— — — Tychonem.
8	53	— — — Manilium.
8	56	— — — Menelaum.
8	57	— — — Soſigenem.
9	0	— — — Plinium.
9	2	— — — Poſſidonium.
9	5	— — — Bedam.
9	7	— — — Fracaſtorium.

9^h	$9'$	Umbra attigit Paludem Somni.
9	11	— — — Taruntium.
9	12	— — — Mare criſium.
9	16	— — — Langrenium.
9	17	— — — Mare criſium totum in umbra.
11	22	Obſcuratio totalis ad Nodum occidentalem.
11	12	Emerſio & prima apparitio lucis.
11	14	Umbra detexit Grimaldum.
11	17	— — — Ariſtarchum.
11	21	— — — Kepplerum.
11	23	— — — Gaſſendum.
11	32	— — — Platonem & Copernicum.
11	33	— — — Archimedem.
11	40	— — — Tychonem.
11	43	— — — Ariſtotelem.
11	45	— — — Manilium.
11	49	— — — Menelaum.
11	52	— — — Poſſidonium.
11	57	— — — Hypatium.
12	2	Poſt med. noct. S. Theophilum.
12	10	— — — Taruntium cum initio maris criſii.
12	10	— — — Mare criſium culminante luna.
12	12	— — — Langrenium.
12	15	Finis Eclipſis e regione Langrenii.

	Med. Ecl.		*Obſcur. tot.*		*Ecl. univerſ.*
Ex obſerv.	$10^h\ 17'\ 0''$	—	$1^h\ 50'\ 0''$	—	$3^d\ 56'\ 0''$
Ex de la Hire.	10 20 7	—	1 47 2	—	3 58 42
Ex Flamſt.	10 19 23	—	1 43 52	—	3 54 56
Ex Manfred.	10 17 0	—	1 46 0	—	3 56 0

Obſervatio ejusdem Eclipſis facta a P. Simonelli in Eccleſia Orientali Pekini.

8h 20′	Initium Eclipſis.		Luna verſabatur in ultimo quadrante Anomaliæ pridie tranſitus per Apogæum, & in ipſo fere Nodo boreo.
9 25	Immerſio totalis.		
11 12	Emerſio prima.		
12 18	Finis Eclipſis.		

Eclipſis Lunæ d. 22 Decemb. 1722.

Căm. Hĭ. a 61 l. 11.

Poſt Meridiem.

Pekini toto Eclipſis tempore denſæ nubes eripuere omnem lunæ aſpectum. Ex Cantonenſium autem obſervatione annotata eſt poſt mediam noctem.

Temp. vero.

12h	11′	Emerſio maris Nectaris, &
12	31	Finis Eclipſis.

In *Kieu-Kiam* Provinciæ *Kiang-Si* obſervatæ ſunt Phaſes ſequentes a P. Carolo Slaviczek.

10h	50′	0″	Umbra attigit inferiorem limbum Copernici.
11	5	30	Immerſio S. Dionyſii, & Emerſio Copernici.
11	20	0	Umbra ad limbum ſuperiorem Grimaldi.
11	26	0	inferiorem ejusdem.
11	34	0	Emerſio totalis S. Dionyſii
12	35	30	Poſt mediam noctem Finis Eclipſis.

Luna

Luna erat in ultimo quadrante Anomaliæ ante medium & in receſſu a Nodo boreo.

Eclipſis Solis parva in Sinis d. 3 Jun. 1723.

Jung-Ching a. 1 l. 5.

Ante Meridiem.

Pekinum uſque non pertigerat hæc Eclipſis: aliunde etiam nulla obvenit obſervatio, niſi aliquot Phaſes annotatæ a P. Carolo Slaviczek in *Nanchang* metropoli Provinciæ *Kiang-Si*, videlicet

Temp. ver.

9^h	53′	0″	Initium Eclipſis.			
10	37	30	Maxima obſcuratio	dig.	I	36′
10	50	0	Umbra regreſſa ad	dig.	I	30′
11	4	30	— — —	dig.	I	0
11	14	30	— — —	dig.	0	30′
11	22	0	Finis Eclipſis.			

Sinoæ in Cochinchina eadem Eclipſis obſervata.

8^h	27′	Initium.	
10	42	Finis	Quantitas maximæ obſcurationis dig. 3.

Luna erat in 3^{tio} Anomaliæ quadrante poſt medium & in acceſſu propinquo ad Nodum boreum.

Eclipſis Lunæ totalis d. 22 Oƈt. 1725.

Jung-ching. a. 3 l. 9.

Poſt mediam Noƈtem.

Temp. ver.					
0^h	43′	30″	Initium	Eclipſis	prope Nodum Orientalem.
0	46	30	Umbra	attigit	Grimaldum
0	51	0	—	—	Ariſtarchum.
0	54	30	—	—	Keplerum.
0	57	30	—	—	Mare humorum.
0	58	30	—	—	Gaſſendum.
1	0	30	—	—	Sinum iridum & Morinum.
1	2	0	—	—	Copernicum.
1	4	0	—	—	Bullialdum.
1	6	30	—	—	Eratoſthenem.
1	9	30	—	—	Platonem.
1	13	30	—	—	Tychonem.
1	15	0	—	—	Aratum toto Tychone jam teƈto
1	17	30	—	—	Manilium.
1	20	0	—	—	Menelaum.
1	22	30	—	—	S. Dionyſium.
1	24	30	—	—	Plinium.
1	26	30	—	—	Poſſidonium.
1	27	30	—	—	S. Catharinam.
1	31	0	—	—	S. Theophilum & Cenſorinum.
1	33	0	—	—	Paludem Somni.
1	35	0	—	—	Proclum.
1	35	30	—	—	Mare criſium & Godenium.
1	38	30	—	—	Littus occiduum Maris Criſ.
1	39	30	—	—	Langrenum.

1ʰ	42′	0″	Immerſio totalis Lunæ ad Nodum Occidentalem.
3	23	0	Recuperatio prima lucis circa Nodum Orientalem.
3	26	0	Umbra retegit Grimaldum.
3	27	0	— — Totum Grimaldum.
3	28	0	— — Galilæum.
3	31	30	— — Ariſtarchum.
	Temp.	*ver.*	
3ʰ	33′	30″	Umbra retegit Keplerum.
3	34	30	— — Mare humorum.
3	38	30	— — Gaſſendum.
3	45	0	— — Platonem.
3	46	30	— — Timocharim.
3	50	0	— — Tychonem totum.
3	54	30	— — Sinum æſtuum totum.
3	58	30	— — Manilium.
4	1	30	— — Menelaum.
4	3	30	— — Poſſidonium & Endymionem.
4	5	30	— — Plinium.
4	11	0	— — Cenſorinum.
4	12	0	— — Paludem Somni.
4	13	30	— — Littus Orientale maris criſ.
4	17	30	— — Mare criſium totum.
4	20	0	— — Langrenum.
4	21	30	Finis Eclipſis prope Nodum Occidentalem.

Diameter Lunæ ante & poſt Eclipſim micrometro dimenſa erat 32′ 30″.

Cœlum ſatis ſerenum durante tota Eclipſi, aer tamen paulo craſſior in emerſione Lunæ ex umbra fecit nonnihil dubiam ob-

ſervationem macularum. Sed & penumbra permodica aliquam dubietatem fecit in principio Eclipſis. In medio obſcurationis totalis ſemper apparuit Luna colore ſubrufo.

Luna erat circa medium 2[di] quadrantis Anomaliæ & fere in ipſo tranſitu Nodi borei.

Eclipſis Lunæ partialis d. 16 April. 1726.

Jung-Ching. a. 4 l. 3.

Poſt meridiem.

Cœlum Pekini valde erat oppletum nubibus, quibus involuta hæſit Luna, ut diſcerni nihil poſſet, niſi circa finem Eclipſis, quando incipiebant paulatim rareſcere nubes, & per modiciſſima intervalla ſemel iterumque allucere Luna. Tum vero notatæ ſunt ſequentes Phaſes.

Temp. ver.

9h	49′	30″	Totus Menelaus extra umbram.
10	4	0	Poſſidonius totus extra umbram, quæ mare criſium medium ſecabat.
10	7	0	Totum mare criſium extra umbram.
10	15	30	Finis Eclipſis & exitus umbræ inter Mercurium & Meſſallam. Erant tamen, qui ſemi-minuto citius annotaverant accidiſſe finem Eclipſis.

Luna erat in 3[tio] Anomaliæ quadrante ante medium, & receſſu a Nodo auſtrino.

Eclipſis Lunæ partialis nocte inter 19 & 20 Aug. 1728.

Jung-Ching. a. 6 l. 7.

Ante & poſt mediam noctem.

Cœlum Eclipſis tempore ſatis tranquillum, & ſerenum erat, excepta ultima ſemi-hora, quando aer craſſior & vapores addenſati ſic obſederunt Lunam, ut maculæ & umbræ margo ægerrime diſtingui poſſent. Unde momentum finis non ex immediata obſervatione, ſed ex aliis Phaſibus obſervatis collectum, & adnotatum fuit, uti fere etiam de momento initii factum eſt.

Paulo ante initium diameter Lunæ micrometro dimenſa erat 30′ 50″ Tum

Temp. ver.

11ʰ	2′	0″	Initium Eclipſis paulo infra Cleoſtratum.
11	13	0	Umbra attigit Ariſtarchum.
11	14	30	— texit Ariſtarchum totum.
11	15	20	— attigit Platonem, quem
11	16	50	— texit totum
11	22	20	— attigit Galilæum & Timocharim.
11	23	20	— — Pitheam.
11	26	30	— — Keplerum.
11	27	30	— — Ariſtillum.
11	31	30	— — Hevelium, Copernicum & Endymionem.
11	36	20	— — Ricciolum.
11	38	15	— — Poſſidonium.
11	40	10	— — Grimaldum & Mercurium.

Temp. ver.			
2h	38′	30″	Initium Eclipſis contra Hevelium.
2	41	0	Umbra ad Grimaldum. qui
2	42	30	— merſus totus.
2	43	0	— — Galilæum.
2	47	0	— — Ariſtarchum.
2	48	30	— — Keplerum.
2	50	0	— — Gaſſendum.
2	58	0	— — Copernicum.
3	3	30	— — Sinum æſtuum orientaliorem.
3	9	0	— — Tychonem.
3	17	30	— — Menelaum.
3	24	30	Poſſidonius totus in umbra.
3	26	0	Umbra ad Fracaſtorium.
3	31	0	— — Proclum.
3	32	0	— — Mare criſium.
3	35	30	— — Langrenum.
3	39	0	Immerſio totalis Lunæ inter Langrenum & mare criſium.
5	17	10	Prima emerſio lucis infra Grimaldum.
5	21	9	Grimaldus prodire incipit.
5	22	25	— — totus emerſit.
5	28	0	Emerſit Gaſſendus.
5	30	35	— Keplerus.
5	36	40	Umbra per centrum Tychonis.
5	37	20	Tycho totus ex umbra.
5	40	35	Copernicus totus emergit.
5	46	28	Plato incipit emergere.
5	48	30	Totus detegitur.

5h

5^h	50′	0″	Emerſere ſinus æſtuum.
5	53	50	Architas.
5	55	20	Manilius.
5	57	15	Ariſtoteles.
5	58	45	Menelaus.
5	59	10	Ariadæus.
6	2	30	Reſtat in umbra $\frac{1}{4}$ diametri Lunæ.
6	2	50	Prodeunt Plinius.
6	5	45	Poſſidonius, Vitruvius, & Cenſorinus.
6	10	0	Taruntius.
6	10	30	Proclus.
6	13	10	Langrenus totus detectus,
6	13	30	Mare Criſium incipit emergere.
6	16	30	Totum prodiit.
6	17	40	Finis Eclipſis contra mare Criſium ac tum in linea verticali Oenopides fere cum Heraclide.

Luna erat in 2do Anomaliæ quadrante ſub initium, & in receſſu a Nodo auſtrali.

Eclipſis Solis magna d. 15 Jul. 1730.

Jung-Ching. a. 8 l. 6.

Circa meridiem.

Ab exortu diei cœlum valde nubilum, ac dein copioſæ pluviæ uſque ad tempus Eclipſis, quando ſubito iſtis ceſſantibus rarefactæ nubes dederunt locum obſervandæ Eclipſis ſatis commode quoad maiorem partem, ut ſequitur:

Temp. ver.				
11^h	46′	0″	a. m. obſcuratio digit. Sinic.	III
11	51	0	— — — —	IV
0	2	0	p. m. — — —	V
0	14	0	— — — —	VI
0	26	30	— — — —	VII
0	40	0	— — — —	VIII
0	51	0	Summa Eclipſis. —	VIII ¼
1	2	0	— — — —	VIII
1	16	20	— — — —	VII
1	27	50	— — — —	VI
1	39	0	— — — —	V
1	50	0	— — — —	IV
2	0	0	— — — —	III
2	9	20	— — — —	II
2	18	20	— — — —	I
2	27	10	Finis Eclipſis. —	O

Erant tum plures maculæ in ☉, quarum duæ centrum jam prætergreſſæ ſeſqui digitum circiter diſtabant verſus Sud-Weſt. iſtarum obtectio non fuit notata. Retectio vero accidit prioris 1^h 18′ 45″ alterius 1^h 23′ 50″. Aliæ quinque erant ad Nord-Oſt. intra I & II digitum ab ingreſſu ſeu margine Solis. Ac omnium major obtecta fuit p. m. 0^h 22′, intra moram unius minuti, ſed ejus retectio non fuit obſervata, ſequentes quatuor minores maculæ obtectæ ſunt. 1^a: 0^h 27′ 50″ & iterum retectæ 1^a: 2^h 5′. 20″.

Tectæ.					*Retectæ.*			
2^a	0^h	31′	40″	—	2^a	2^h	7′	30″
3	0	37	10	—	3	2	11	25
4	0	38	35	—	4	2	12	25

Luna erat in 1mo Anomaliæ quadrante intra 10 gr. ab Apogæo, & in acceſſu ad Nodum auſtralem.

Eclipſis Lunæ parva d. 29 Julii 1730.

Jung-Ching. a. 8 l. 6.

Sub mediam noctem.

Pekini obſervari non potuit, cœlo denſis nubibus per totam noctem obducto. Sed P. Simonelli in urbe Chang-Xo Provinciæ Nankinenſis, (diſtat hæc ad ortum Pekino 16′ vel 17′ temporis) obſervavit.

Temp. ver.

10^h	55′	0″	Initium Eclipſis.
12	49	0	p. m. n. finem ejuſdem cum quantitate maxima. 3^d 10′, itaque medium Eclipſis fuit hor. 11 52′ quod pro Pekino calculus dabat hor. 11 36′ cum diff. 16 min. ſatis juſte.
			Item P. Lima in regia Cochinchinæ obſervavit.
9	58	0	Initium ejuſdem Eclipſis &
11	50	0	Finem. Unde medium ibi erat h. 10 54′ ex quo naſcitur differentia ejus meridiani a Pekino ad occaſum 42′ min. temporis, quod videtur ſatis propinquum vero.
			Luna erat in 3^{tio} quadrante Anomaliæ, ſemiſigno poſt Perigæum, & in receſſu a Nodo boreo.

8^h	19′	30″	Umbra redux ad digit. II.
8	26	0	Detecta lucida inter Wendelinum, & Petavium.
8	31	0	Umbra ſtringit Digitum I culminante lucida ♈.
8	35	0	Emergit Furnerius.
8	41	0	Finis Eclipſis a Furnerio nonnihil ad Auſtrum.

Tum dimenſa micrometro diameter Lunæ erat 31′ 16″, & verticalis per centrum Lunæ hinc tranſibat Geminum atque inde Bullialdum quaſi ſtringens Plinium.

In inſula Rota, ſeu S. Annæ ex Marianis una, P. Joſephus Bonanni vidit initium hujus Eclipſis veſpere. 7^h 58′ circiter, & finem annotavit 10^h 23′, unde medium ibi 9^h 10′ $\frac{1}{2}$.

Luna erat in 4to Anomaliæ quadrante ſign. $9\frac{1}{3}$, & in acceſſu ad Nodum auſtralem.

Eclipſis Solis horizontalis d. 29 Dec. 1731.

Jung-Ching. a. 9 l. 12.

Mane.

Pekini horizon ortivus erat valde clarus, paulo ſuperius diſcerptæ ac virgatæ ſtabant nubes. 7^h 20′ cœpit Sol exoriri ferens ſecum Eclipſim grandem, quin tamen liberis oculis videri poſſet ob nimiam vivacitatem reſiduorum radiorum ſolis: per Helioſcopium autem, & in ſpecie intromiſſa valde informis apparebat limbus tum Solis tum Lunæ, æſtimabaturque Eclipſis aliquantum ſuperare digitos $8\frac{1}{2}$, atque adhuc paulum increſcere. Circa hor. 7 26′ notabatur Phaſis ſumma ferme dig. $8\frac{3}{4}$. Circa 7^h $31\frac{1}{2}$ centra Solis, & Lunæ erant in eodem verticali cum Phaſi ſeu Eclipſi proxime dig. $8\frac{1}{3}$. Hor. 7 34′ ſol intravit nubem cum Eclipſi, quaſi digit. 8. Tum

Temp. ver.

7h	50′	0″	Sol e nube prodiens monſtravit Eclipſim dig.	VI
7	58	0	Eclipſis digitorum. — — — —	V
8	6	0	Eclipſis digitorum. — — — —	IV
8	13	30	— — — — — — — —	III
8	21	0	— — — — — — — —	II
8	28	30	— — — — — — — —	I
8	36	0	Finis Eclipſis clariſſime viſus. — — —	O

Momenta temporis deſumpta ſunt ex Armilla æqv.

Eclipſis Lunæ totalis d. 8 Junii 1732.

Jung-Ching. a. 10 l. 5.

Veſpere.

Nubes, quæ tota die majorem cœli partem obtinuerant, veſperi undique diſparuere, præterquam ad ortum hybernum uſque ad meridiem, ubi pertinaciter fixæ hærebant ſupra horizontem ad altitudinem 20 gr. circiter, Lunam ita aſpectui eripientes, ut de immerſione Ecliptica prorſus nihil obſervari poſſet. Solum circa hor. 8 veſp. paucis minutis ante initium Eclipſis per modicum hiatum nobis ſic apparuit Luna, ut commode ejus diameter micrometro menſurari poſſet, quæ tum erat 31′ 45″. Poſt h. 9½ cœpit tandem Luna ſupra nubes eluctari rufo umbræ colore penitus imbuta, ſic tamen, ut ad Auſtro-Occaſum paulo dilutior eſſet color. Sed præter Ariſtarchum non poterat alia macula in obſcurata Lunæ facie diſcerni, ſtabat tum Luna inter ſtellas plures in dextro ſeu orientaliore pede Serpentarii, ſatis erronee communiter expreſſas in tabulis cœleſtibus, uti jam olim annotavit Keplerus Cap. 14 de nova ſtella Serpentarii. Omnium autem pro-

xima Lunæ erat penultima ad ortum, quam præcedunt ſociæ duæ ſtellulæ, quibuscum efformat triangulum ſcalenum obtuſangulum hoc fere ſitu:

Quando Luna primum e nube promicuit * *b*
Stellula *b*. a limbo Lunæ boreo diſtabat * *a*
tantum 2′ minutis & ſenſim ab eo recedebat. * *c* .
Stellula vera *a* jam erat occultata ſub Luna, de qua ad limbum occidentalem prodiit h. 10 30′ præciſe, clariorem autem ſtellam *c* abſorbuit Luna 9^h 55′ ac prope centralem tranſitum emenſam reſtituit h. 11 16′. Diſtantiæ ſtellularum inter ſe micrometro utcunque dimenſæ, ſunt *c a* 14′ 40″ *c b* 38′ 25″ *a b* 29′ 20″. In Atlante cœleſti Flamſtedii exhibentur ſtellæ 2 Auſtraliores, *c* & *a* ſub litera B, deficit autem borealior *b*.

Porro Emerſionem Lunæ ex umbra totam cœlo ſatis & puro, & tranquillo ſpectare licuit, ut ſequitur:

Temp. ver.

10^h	41′	0″	Veſp. Prima apparitio lucis a Grimaldo paulum ad Auſtrum.
10	44	0	Grimaldus incipit prodire.
10	46	0	— — totus emerſit.
10	47	30	Umbra in Luna digiti IX.
10	48	50	Galilæus incipit emergere.
10	49	30	— Plene prodiit.
10	54	0	— — digit. VIII.
10	55	0	Emerſit Ariſtarchus.
10	56	0	Herigonius & Keplerus.
10	57	0	Morinus.
11	1	20	— — digit. VII.

11^h

11[h]	2′	0″	Emerſit Bullialdus.
11	4	0	Tycho incipit prodire.
11	6	20	— totus emerſit.
11	7	10	Emerſit Copernicus & Pitheas.
11	7	40	— — — dig. VI.
10	10	30	Timocharis emergit.
11	11	10	Plato incipit prodire.
11	13	0	— apparet totus.
11	14	0	Archimedes emerſit, & umbra per centrum ☾ ſeu dig. — V.
11	20	20	dig. — IV.
11	21	0	prodiit Ariſtoteles.
11	22	0	— Manilius.
11	24	30	— Menelaus.
11	26	0	— Ariadæus.
11	26	30	— — — dig. III.
11	27	30	Poſſidonius incipit prodire.
11	29	20	Totus apparet.
11	29	40	Emerſit Plinius.
11	31	0	— Fracaſtor.
11	32	0	— Vitruvius.
11	32	45	— — dig. II
11	33	0	Emerſit Cenſorinus.
11	33	30	Promontorium acutum.
11	37	0	Proclus.
11	37	30	Incipit prodire mare criſium.
11	39	0	Umbræ in Luna adhuc dig. I.
11	42	0	Emerſit Langrenus.
11	45	0	Finis Eclipſis inter Langrenum & mare criſium.

Poſt Eclipſim diameter Lunæ in Micrometro 32′ 20″.

Centrum apparentis diſci Lunæ proxime erat in decuſſatione rectarum hinc per Tychonem & Archimedem, inde per Landſpergum & Ariadæum.

Luna erat in 1mo Anomaliæ quadrante, ſign. 2$\frac{2}{3}$ & in acceſſu ad Nodum boreum.

Eclipſis Lunæ totalis d. 2 Decemb. 1732.

Jung-Ching. a. 10 l. 10.

Ventus furioſus ac turbulentus, cœlumque pulveribus & nubibus oppletum non permiſerunt in obſervatorio publico Eclipſim hanc ſpectari. In Collegio autem noſtro ſequentia annotavit P. Car. Slaviczek poſt mediam noctem.

Temp. ver.

3^h	45′	0″	Initium Eclipſis libero oculo æſtimatum.
4	29	0	Umbra ad Cenſorinum & 9 dig. Europ.
4	37	0	Umbra ad Proclum & 10$\frac{1}{2}$ dig. Europ.
4	44	30	Immerſio totalis.

In domo PP. Gallorum ſequentia obſervarunt PP. Gaubil & la Charme.

3^h	44′	30″	Initium accidiſſe æſtimarunt.
3	49	33	Obſcuratio quaſi unius digiti Europæi.
4	31	41	Obſcuratio dig. 9 43′ Europ.
4	36	17	Umbra ad mare criſium.
4	39	49	Totum mare criſium in umbra.
4	44	58	Immerſio totalis.

De Emerſione nihil prorſus potuit videri neque Luna ob ſpiſſum aerem unquam apparuit.

In Chandernagor prope Bengalam P. Stanislaus Boudier in obſervatione hujus Eclipſis notavit Immerſionem totalem acciſſe	2^h	$53'$	$15''$
Accidit autem eadem Pekini proxime	4	45	0
Unde Chandernagor occidentalius Pekino	1	51	45

Ex obſervatis autem utrobique immerſionibus ſatellitis 1^{mi} ♃.

17 Feb. 1732.	9^h	$55'$	$12''$	12 Jan. 1733.	2^h	$32'$	$23''$	11 Feb. 1733.	4^h	$26'$	$8''$	Chandernagor.
	11	45	45		4	23	10		6	16	45	Pekini.
Differentia.	1	50	33		1	50	47		1	50	37	minor ſcilicet 1'.

Eclipſis Lunæ partialis d. 29 Maji 1733.

Jung-Ching. a. 11 l. 4.

Poſt mediam noctem.

Cœlum ſatis ſerenum & perquam tranquillum favit obſervationi, quam modicæ nubeculæ circa medium Eclipſis occurrentes turbarunt. Ultimo tamen quadrante jam depreſſior Luna, denſiorem Atmoſphæram ſubiens aſpectum effugit, ut finis Eclipſis obſervari non poſſet. Sed et initium Eclipſis ob nimiam umbræ exilitatem immediate notari haud potuit. Ex ſequentibus autem phaſibus deductum erat, ut infra. Umbra erat adeo diluta, ut lucidiores aliquot maculæ, etiam inumbratæ, bene diſtinguerentur præſertim ad utrumque marginem orientalem, ſcilicet ubi littoris ecliptici tractus & occidentalem, ubi mare criſium, etiam ex umbra diſtincte apparuit. In parte Lunæ orientali umbra aſcendit uſque ad extimum promontorium terræ Pruinæ, ubi diu hæſit, quin

E 2

pertingeret ad Ecphantum, in parte occidentali ultra apicem boreum maris criſium non præceſſit, in medio pervenit uſque ad Archimedem, quem raſit, neque obtexit.

Horologium ante Eclipſim correctum fuit per culminationem capitis Ophiuchi, ac durante Eclipſi identidem examinatum per culminantes ſtellas γ δ σ & π ſagittarii, item per lucidam Aquilæ & cornua capricorni.

Circa h. 1 poſt mediam noctem diameter Lunæ in micrometro fuit 30′ 15″ ferme, & circa h. 4¼ tantum erat 30′ 0″.

In reticulo filari per 10 dig. ſinicos diviſo notata fuit.

Temp. ver.

1ʰ	29′	40″	Umbra digiti		I	3ʰ	15′	30″	Umbra digitor.		VII
1	37	45	Digitorum		II	3	34	0	—	—	VI
1	46	55	—	—	III	3	46	45	—	—	V
1	56	30	—	—	IV	3	57	45	—	—	IV
2	7	10	—	—	V	4	7	15	—	—	III
2	19	40	—	—	VI	4	16	30	—	—	II
2	38	0	—	—	VII				Non potuit videri.		I

Reliquæ autem Phaſes fuerunt annotatæ ut ſequitur.

1ʰ	22′	0″	Initium Eclipſis recta contra Byrgium.
1	29	0	Umbra ad Grimaldum.
1	32	0	— — Merſenum Grimaldo toto tecto.
1	36	0	— — Gaſſendum.
1	37	30	— — Campanum.
1	41	30	— — Galilæum.
1	44	30	— — Tychonem.

1^h	$45'$	$0''$	Umbra ad Bullialdum.
1	46	0	Tycho totus immerſus.
1	47	0	Umbra ad Pitatum.
1	49	50	— — Keplerum.
2	0	35	— — Copernicum.
2	1	45	— — Ariſtarchum.
2	3	0	— — Ptolomæi lucidam.
2	5	10	— — Copernicus & Ariſtarchus una merſi.
2	11	55	— — Sacroboſcum.
2	13	30	— — Eratoſthenem.
2	14	30	— — Fracaſtorem.
2	15	40	— — Pitheam.
2	18	0	— — S. Cyrillum.
2	21	50	— — Ariadæum.
2	25	40	— — Manilium.
2	27	10	— — Timocharim.
2	29	50	— — Cenſorinum & Goclenium.
2	31	0	— — Promontorium acutum.
2	33	0	— — Menelaum, & Langreni apicem auſtrinum.
2	36	45	— — Langreni apicem boreum.
2	38	30	— — Plinium.
2	39	50	— — Taruntium.
2	44	0	— — Aratus hæret in margine umbræ.
2	51	0	— — Littus auſtrale maris criſium.
2	54	0	— — Proclum.
3	2	0	— — Ariſtarchus incipit emergere.
3	3	40	— — Patet totus.
3	6	0	— — Emerſit Timocharis.
3	10	30	— — Emerſit Pitheas.

3^h	13′	0″	—	—	Mare criſium totum in umbra.
3	18	30	—	—	Emerſit Galilæus.
3	22	0	—	—	— Ricciolus.
3	25	0	—	—	Grimaldus incipit emergere.
3	28	0	—	—	Totus patet.
3	28	30	—	—	Copernicus prodit.
3	30	30	—	—	Flene detegitur.
3	36	30	—	—	Manilius & Menelaus ſimul prodeunt.
3	38	50	—	—	Emerſit Reinoldus.
3	40	45	—	—	— Plinius.
3	43	30	—	—	Proclus.
3	45	0	—	—	Gaſſendus.
3	48	0	—	—	Merſennus.
3	54	0	—	—	Ariadæus cum toto mari criſium.
4	1	30	—	—	Promontorium acutum.
4	3	45	—	—	Cenſorinus.
4	5	45	—	—	S. Catharina.
4	8	0	—	—	Tycho incipit prodire.
4	10	0	—	—	Totus patet.
4	13	0	—	—	Emerſit Fracaſtor.

Summa obſcuratio in reticulo filari erat dig. Sinic. $7\frac{1}{2}$.

Eclipſis Lunæ partialis ad 21 Nov. 1733.

Jung-Ching. a. 11 l. 10.

Poſt meridiem veſpere.

Cœlum toto Eclipſis tempore valde tranquillum & ſerenum, perque accommodum erat obſervationi, umbra & penumbra erant admodum dilutæ, neque initium Eclipſis bene poterat diſtingui, ſed

ex ſequentibus Phaſibus deductum fuit. Maculæ lucidiores etiam intra umbram utcunque diſcernebantur, centrum apparentis diſci Lunæ erat proxime ad lucidum colliculum, qui eſt in medio ſinus æſtuum occidentalioris.

Horologium correctum fuit ex culminatione ſtellæ Fomahant, & poſtea examinatum ad culminantes Pegaſi Algenib, Ceti lucidam caudæ, atque lucidam Arietis.

Diameter Lunæ uno quadrante horæ ante Eclipſim in micrometro erat 34′ 0″. In fine Eclipſis vero dimenſa eſt 34′ 27″.

Temp. ver.

7h	15′	0″	Initium Eclipſis inter Seleucum & Cardanum.
7	22	30	Umbra ad Ariſtarchum.
7	23	40	— — Galilæum.
7	24	15	— — Ecphantem.
7	26	0	— — Heraclidem.
7	27	30	— — Heliconem.
7	27	50	— — Grimaldum.
7	30	30	— — Grimaldus totus in umbra.
7	31	0	— — Ad Keplerum.
7	33	30	— — Platonem.
7	34	0	— — Pitheam.
7	34	45	— — Plato totus in umbra.
7	36	0	— — Ad Timocharim.
7	37	50	— — Copernicum.
7	39	0	— — Archimedem.
7	40	20	— — Copernicus totus in umbra.
7	42	30	— — Ad Ariſtotelem.
7	44	30	— — Eudoxum.

7^{h}	$47'$	$35''$	Umbra ad Gaſſendum.
7	49	0	— — Herigonium.
7	51	0	— — Gaſſendus totus in umbra una cum Morino.
7	52	30	— — Merſennum, Manilium & Endymionem.
7	53	40	— — Endymion totus in umbra.
7	55	25	— — Menelaum.
7	59	30	— — Plinium & Hermetem.
8	0	0	— — Bullialdum.
8	3	20	— — Ariadæum.
8	6	30	— — Munoſium & paludem ſomniorum.
8	8	0	— — Campanum.
8	8	25	— — Mare criſium.
8	10	10	— — Proclum.
8	13	0	— — Promontorium acutum.
8	14	30	— — Cenſorinum.
8	16	0	— — Capuanum.
8	17	0	— — Taruntium.
8	18	0	— — Pitatum, mari criſio plene tecto.
8	22	20	— — Firmicum & S. Theophilum.
8	24	0	— — Cichum.
8	24	50	— — S. Catharinam.
8	28	0	— — Goclenium.
8	30	50	— — Langrenum.
8	35	10	— — Fracaſtorem, Langreno plene tecto.
8	42	0	— — Sacroboſcum.
8	43	0	— — Petavium.
8	44	50	Emerſit totus Merſennus.
8	45	30	— — Pitatus.
8	53	45	— — Gaſſendus.

8^{h}

8^h	56′	15″	Emerſit totus Bullialdus.
8	57	0	— — Herigonius & Morinus.
9	0	15	— — Grimaldus.
9	6	0	Fracaſtor incipit emergere.
9	9	10	Emerſerant Galilæus & Petavius toti.
9	12	20	Emerſit totus Fracaſtor.
9	16	30	— — Keplerus.
9	21	0	Ariſtarchus incipit prodire.
9	21	50	— — prodiit totus cum S. Catharinâ.
9	22	20	Copernicus incipit emergere.
9	23	45	— — totus patet.
9	25	0	Emerſit totus S. Theophilus.
9	29	5	Incipit emergere Pitheas & Langrenus.
9	30	0	Emerſit totus Goclenius.
9	32	15	— — — Ecphantus.
9	34	0	— — — Ariadæus.
9	35	0	— — — Timocharis.
9	35	30	— — — Heraclides & Langrenus.
9	36	55	— — — Manilius & Cenſorinus.
9	39	0	Emerſit Promontorium acutum & Helicon.
9	40	50	— Menelaus.
9	43	50	— Plinius.
9	44	30	— Taruntius.
9	45	0	Plato incipit emergere.
9	46	35	— Emerſit totus.
9	48	40	Mare criſium incipit retegi.
9	51	30	Prodeunt Proclus & Eudoxus.
9	53	30	— — Poſſidonius, & Ariſtoteles.
9	57	0	— — Atlas.
9	58	0	— — Et totum mare criſium.

10^h 1′ 30″ Endymion plene detegitur.
10 4 30 Finis Eclipſis contra Meſſalam.

In reticulo filari per 10 digitos ſinicos diviſo erat.

7	22	15	Umbra digiti I	—	8^h	57′	0″	Umbra digitorum VII
7	29	50	— digitorum II	—	9	12	30	VI
7	38	0	— — III	—	9	24	0	V
7	46	30	— — IV	—	9	33	0	IV
7	55	20	— — V	—	9	41	30	III
8	7	0	— — VI	—	9	49	45	II
8	22	20	— — VII	—	9	57	15	digiti I

Summa Eclipſis in reticulo fuit digitorum ſinicorum 7,25′ quam proxime i. e. Europæorum 8^d 54′.

Macula Pitati non plene intravit umbram, ſed margo ejus auſtralis aliquantum extra ejus limbum remanſit.

Hor. 9 22′ Luna occultavit parvam ſtellam 6^{tæ} Magnitudinis in collo Tauri, quæ in atlante cœleſti Flamſtedii eſt ω præcedens. Locus immerſionis erat modice ad auſtrum Schikardi.

Caſani ad volgam Fl. in Ruſſia, Dominus de l'Iſle la Croyes, qui ejus latitudinem ſtatuit 55°, 47′. Finem hujus Eclipſis Lunæ obſervavit veſpere 5^h 34′. Unde prodit Caſanum occidentalis eſſe Pekino horis 4 30′ 30″.

Eclipſis Lunæ horizontalis d. 7 Aprilis 1735.

Iūg.-ching. a. 13 l. 3.

Poſt meridiem veſpere.

Debebat Luna exoriri jam quaſi 5 digitos ſinicos, ſive ad centrum uſque obſcurata. Verum denſæ nubes, quæ horizontem occupabant, penitus eripuerunt aſpectum, & Lunæ exorientis, & ſubſecutæ ſummæ obſcurationis. Tandem hora 7 veſp. ſupra nubes emergens Luna oſtendit decrementum Eclipſis ad dig. 5 umbra per centrum tranſeunte. Exinde obſervatæ fuerunt ſequentes phaſes tremente licet teleſcopio a vento.

Temp. ver.				
7^h	3′	0″	Emerſit	Ariſtarchus.
7	3	30	— —	Copernicus.
7	11	0	— —	Pitheas.
7	19	30	— —	Ariadæus, & cuſpis auſtr. Langreni.
7	20	0	— —	Timocharis.
7	21	0	— —	Cenſorinus.
7	22	0	— —	Manilius.
7	25	0	— —	Langrenus totus.
7	26	0	— —	Promontorium acutum.
7	28	0	— —	Menelaus.
7	32	0	— —	Plinius.
7	32	30	— —	Platonis margo orientalis.
7	34	0	— —	Plato totus.
7	35	30	— —	Taruntius.
7	43	0	— —	Ariſtoteles, & Poſſidonii margo ortivus.
7	45	30	— —	Proclus, & totus Poſſidonius.

7^h	50′	0″	Emerſit Atlas.
7	53	30	— — Mare criſium totum.
7	55	30	— — Endymion.
7	59	0	Finis Eclipſis contra Beroſum. In reticulo erat
7	19	30	Umbra dig. ſin. IV, 7^h 42′ 30″ Umbra dig. ſin. II
7	31	30	— — — III, 7 51 0 — — I

Finita Eclipſi diameter Lunæ in Microm. erat 31′ 44″

Eclipſis Solis d. 16 Octob. 1735.

Jung.-ching. a. 13 l. 9.

Mane.

Cœlum valde obnubilatum, atque etiam pluvioſum non admiſit obſervationem hujus Eclipſis, quæ magna debebat eſſe 8⅓ digitorum ſinicorum. Solum conceſſit, ut Sol circa 8^h 20′ ad rariores nonnihil nubes delatus per iſtarum intervalla nudis oculis interruptim uſque ad 8^h 45′ ſpectari poſſet cum Eclipſi in capite a dig. 5to uſque ferme ad 8^{vum} immerſionis. Ob morulas tamen apparitionis valde breves nulla phaſis præciſe fuit annotata. Facta autem collatione cum typo juxta calculum præparato, æſtimare licuit, ſpectatas phaſes Eclipſis ſatis exacte illi concordare. Ipſe typus ex calculo cum hujus ſynopſi hic ſubjicitur.

Temp. ver.

7^h	47′	0″	Initium.
7	54	0	Umbra dig. I
8	1	20	— — II
8	8	40	— — III
8	16	30	— — IV
8	24	0	— — V

Hanc porro Eclipſim Solis obſervavit nitidiſſimo cœlo P. Jac. Phil. Simonelli in Provincia Kiang-ſi prope urbem *ſin-ſun-hien*, quam ait diſtare a Meridiano Pe-

8^h	32′	0″	Umbra dig.	VI
8	40	30	— —	VII
8	50	0	— —	VIII
8	57	45	Max. obſcur.	
9	7	0	— —	VIII
9	16	45	— —	VII
9	26	30	— —	VI
9	35	20	— —	V
9	43	40	— —	IV
9	52	0	— —	III
10	0	0	— —	II
10	8	30	— —	I
10	17	30	Finis.	

kinenſi ad occidentem 8′ min. horar. eſtque in lat. bor. 25° 25′. Ex altitudine autem Solis per umbram gnomonis exactiſſime capta, & correcto horologio collegit initium Eclipſis 7^h 46′ & finem 9^h 48′. Quantitatem ſummæ obſcurationis definivit dig. 4 49′ ſinice. Habebat Sol maculam inſignem in quadrante Euro-boreo, quam tamen Luna non obtexit, proxime accedens ad diſtantiam ſemi-digiti.

Eclipſis Lunæ partialis circa mediam noctem inter 16 & 17 Martii 1737.

Kien-Lung. a 2 l. 2.

Satis bene obſervari potuit hæc Eclipſis, cœlo valde tranquillo, etſi non admodum ſereno, ſed tenui nubilagine obfuſcato, per quam tamen & Luna clare apparuit, & umbra bene terminata, ac ita nigricans, ut maculæ Lunæ intra illam diſcerni non poſſent, ſecus ac alias fieri aſſolet.

Horologium correctum, ſæpiusque examinatum fuit per culminationes plurium ſtellarum in ♌ & ♍ ante, intra, & poſt Eclipſim.

Diameter Lunæ in micrometro initio Eclipſis fuit 34′ 0″ in fine 34′ 25″. Ergo veſpere

0^h	47′	30″	Prodiit totus Goclenius.
0	48	30	Langrenus incipit prodire.
0	52	0	Tycho incipit prodire
0	53	0	Emerſit totus Langrenus.
0	54	0	— Totus Tycho.
0	55	0	Fracaſtor incipit prodire.
0	56	30	Emerſit Santbeckius.
0	58	0	— Fracaſtor totus.
1	3	30	— Petavius.

Eclipſis Lunæ partialis d. 25 Jan. 1739.

Kiĕn-Lung. 2. 3 l. 12.

Mane.

Obſervandæ huic Eclipſi parum favit cœlum ferme ſubnubilum, & ſub initium aliquamdiu vehemens turbo afflavit. Lunam ſat diu iris venuſte colorata cinxerat, cujus inferior pars erat ſemicirculus Lunæ concentricus, ſuperior autem erat arcus ex centro infra Lunam. Umbra etiam male terminata, & limbus ejus intra Lunam ſatis inordinatus, utcunque tamen notatæ fuerunt phaſes ſequentes partim in Obſervatorio publico, partim in Collegio ab Sociis.

Horologium correctum fuit ex culminatione Spicæ, Arcturi & Lancis auſtralis.

Diameter Lunæ initio Eclipſis micrometro dimenſa fuit præciſe 30 minutorum.

Temp. ver.

5^h	24′	30″	Initium Eclipſis paulo infra Cleoſtratum.
5	33	30	Umbra ad Ariſtarchum.
5	34	30	— — Platonem.

5^h	37′	0″	Umbra ad	Galilæum.
5	38	30	— —	Pitheam.
5	39	0	— —	Timocharim.
5	40	0	— —	Ariſtotelem.
5	42	30	— —	Archimedem.
5	43	0	— —	Keplerum & Endymionem.
5	47	30	— —	Copernicum, qui
5	50	0	— —	— — totus tegitur.
5	54	0	— —	Poſſidonium.
5	59	0	— —	Ricciolum & Manilium.
6	0	0	— —	Meſſallam.
6	2	0	— —	Grimaldum & Menelaum.
6	6	30	— —	Plinium.
6	8	0	— —	Soſigenem.
6	10	0	— —	Cleomedem.
6	11	0	— —	Ariadæum.
6	12	0	— —	Mare criſium.
6	15	0	— —	Proclum.
6	23	30	— —	Promontorium acutum.
6	25	0	— —	Cenſorinum.
6	25	30	— —	Mare criſium totum tectum.

Poſtea ob nubila denſiora, & atmoſphæram craſſam Horizontis non poterat amplius bene diſtingui appulſus umbræ ad Lunæ maculas.

Circa hor. 6 50′ in micrometro erat quantitas inumbrationis præter propter maximæ digit. ſinic. 6 5′ hoc eſt Europ. dig. 7 18′.

Eclipſis Lunæ totalis circa mediam noctem inter 20 & 21 Julii 1739.

Kien.-Lung. a 4 l. 6.

Nihil prorſus de hac Eclipſi potuit obſervari Pekini, cœlo denſe nubilato, ac demum etiam in pluvias effuſo.

Sinoæ autem in Regia Cochinchinenſi P. Joannes Siebert, recens hoc anno illuc delatus cœlo ſereno Eclipſim hanc diligenter coram & una cum Rege obſervavit, phaſibus ad bonum horologium automaton ſic annotatis.

Temp. ver. veſpere.

9^h	$41'$	$3''$	Initium obſcurationis.
10	51	4	Immerſio totalis.
11	39	28	Principium emerſionis.
12	49	29	Finis Eclipſis.

Eclipſis Lunæ totalis d. 14 Jan. 1740.

Kien. Lung. a 4 l. 12.

Cœlum ſerenum & omnino tranquillum, nec valde frigidum prorſus favit, ut phaſes totius immerſionis ſatis commode ſpectari poſſent. Umbra erat valde nigra, & ſpiſſa, quin ulla macula vel lucidior (ſecus ac alias ſolet) poſt occultationem tranſpareret. Margo tamen ejus nonnihil inæqualis nec bene rotundus ac circularis. Poſt immerſionem totalem in ſolo occiduo margine, non item in reliquo corpore Lunæ lux ſpuria aliquamdiu refulſit, quæ tamen ipſa ſenſim hebeſcens, inſtar ſtellæ nebuloſæ apparuit, ac tandem penitus evanuit adhuc ante horam 6, ut nihil quidquam Lunæ ſpectabile remaneret, etſi viciniores ſtellæ ac proximus Saturnus

turnus (quicum circa horam 2^{dam} congreſſum habuit valde propinquum) ſatis clare jam allucerent. Sed nec poſtea in recuperatione lucis, quæ debebat adhuc ſupra horizontem aliquot minutis ante ortum Solis accidere, apparuit Luna in nebuloſis vaporibus horizontis abſorpta. Phaſes autem immerſionis tum in Obſervatorio publico, tum in Collegio a noſtris PP. annotatæ ſunt, ut ſequitur.

Horologia correcta ſunt ex culminatione ſpicæ ♍ & Arcturi. Igitur mane.

Temp. ver.

4^h	$0'$	$0''$	Penumbra jam tenuis intra limbum ortivum Lunæ.
4	8	0	Penumbra denſior.
4	13	0	Initium Eclipſis contra Cavalerium.
4	14	15	Umbra ad Grimaldum.
4	15	10	Grimaldus totus tectus.
4	15	30	Galilæus totus tectus.
4	19	30	Umbra ad Ariſtarchum.
4	21	20	— — Totum obtegit.
4	22	30	— — Ad Keplerum.
4	24	45	— — Digitorum II. Europæorum i. e. ſinice dig. 1 40′.
4	25	30	Merſennus in umbra.
4	26	30	Umbra ad Gaſſendum.
4	27	30	— Totum tegit.
4	28	0	— Ad Herigonium.
4	28	50	— Ad Chriſtmannum.
4	30	0	— Ad Schikardum.
4	30	40	Umbra paulo major digitis III. Europ. i. e. ſin. dig. 2 40′.
4	30	45	— Ad Copernicum.

4h	31′	30″	Pitheas mergitur.
4	32	20	Copernicus totus in umbra.
4	33	0	Umbra ad Bullialdum.
4	34	10	— Tegit totum.
4	35	40	— Ad Timocharim.
4	36	20	— Tegit totum.
4	37	0	Eratoſthenes & Munoſius merguntur.
4	39	30	Umbra per medium Pitatum.
4	40	20	— Ad Platonem.
4	41	20	— Totum abſorbet.
4	42	0	— Ad Archimedem.
4	43	30	— Ad Tychonem.
4	44	55	Tycho totus in umbra.
4	45	10	Umbra ad centrum Lunæ, ſeu dig. VI. Europ. & ſin. 5 0′.
4	46	25	— Ad Manilium.
4	47	45	— Totum tegit.
4	49	0	— Ad Ariſtotelem, & Eudoxum.
4	50	24	— Digitorum VII. Europæorum, i. e. ſinic. dig. 5 50′.
4	50	50	— Ad Menelaum.
4	51	50	— Totum obtegit.
4	52	20	— Ad Ariadæum.
4	52	50	— Totum tegit.
4	54	0	— Ad Plinium, & Poſſidonium.
4	55	30	— Tegit totum Plinium.
4	56	20	— Item totum Poſſidonium.
4	59	40	— Ad Promontorium acutum.
5	0	0	— Ad Fracaſtorem.
5	0	16	Umbra ad digit. IX. Europ. i. e. ſinic. dig. 7 30′.

5^h	$1'$	$0''$	Cenſorinus mergitur.
5	1	30	Endymion totus in umbra.
5	5	33	Umbra ad X. dig. Europ. i. e. finic. dig. 8 20′.
5	6	0	— Ad Hermetem & Taruntium.
5	6	50	Proclus mergitur.
5	7	20	Umbra attingit mare criſium.
5	9	45	— Cleomedem.
5	10	15	— Langrenum.
5	12	0	— Totum tegit.
5	13	20	Mare criſium totum in umbra.
5	16	25	Immerſio Lunæ totalis dig. XII. Europ. i. e. fin. X.
5	17	30	Reſidua lux refracta fortior ceſſat.

Ex phaſibus aliquot hujus Eclipſis, Telone in Provincia obſervatis, reſultat Meridiani Pekinenſis & Telonenſis differentia horarum 7 & 22 vel 23 minutorum. Obſervatio refertur in Mémoires de Trévoux ad April. 1740.

Eclipſis Lunæ partialis d. 2 Jan. 1741.

Kien-Lung. a. 5 l. 11.

Mane.

Cœlum erat valde ſerenum & clarum, flante ſub initium Eclipſis frigido Borea paulo fortius. Penumbra erat exigua, & umbra ſatis nigra & diſtincta, potuitque ſatis commode ſpectari Eclipſis usque ad occaſum Lunæ. Diameter Lunæ ante Eclipſim erat in micrometro 30′ 20″ circ. in ipſo vero occaſu Lunæ tantum 30′ 0″. Centrum apparentis diſci erat ab ipſo ſinu æſtuum occidentaliore modice verſus Hipparchum.

Horologium corrrectum ex culminatione Spicæ & Arcturi. In Obſervatorio publico annotatæ fuere phaſes ſequentes.

Temp. ver.			
6ʰ	5′	10″	Initium Eclipſis inter Vietam, & Schikardum.
6	10	0	Umbra ad Schikardum.
6	14	0	— Ad Mare humorum.
6	15	30	— Digiti ſinici I. — — Eur. dig. 1 12′.
6	16	0	— Ad Grimaldum.
6	16	10	— Ad Capuanum.
6	17	20	— Ad Gaſſendum.
6	18	30	— Grimaldum totum texit.
6	19	0	— Ad Campanum.
6	19	30	— Ad Herigonium.
6	22	30	— Ad Tychonem.
6	23	10	— Ad Bullialdum.
6	24	0	— Tychonem totum obtexit.
6	24	20	— Ad Pitatum.
6	25	30	— Dig. ſin. II. — — Eur. dig. 2 24′.
6	32	0	— Ad Galilæum.
6	37	0	— Dig. ſin. III. — — Eur. dig. 3 36′.
6	42	0	— Ad Keplerum.
6	43	0	— Reinoldum.
6	50	30	— Dig. ſin. IV. — — Eur. dig. 4 48′.
6	54	0	— Copernicum, Fracaſtore ſemi-tecto.
6	56	0	— Fracaſtorem totum texit.
6	59	0	— Dig. ſin. IV½ — — Eur. dig. 5 24′.
7	2	0	— Copernicum totum tegit.
7	6	0	— Wendelinum.
7	10	20	— Dig. ſinicor V. — — Eur. dig. 6 0′.
7	14	0	Luna incipit occultari poſt montes ad occaſum.

Eclipſis Lunæ parva d. 19 Maii. 1742.

Kiĕn-Lung. a. 7 l. 4.

Ante mediam noctem.

Eclipſis debebat eſſe tantum 2 digitorum ſinicorum ad partem Lunæ auſtro-occidentalem atque incipere circa h. 10^{mam} ante mediam noctem; ſed cœlum valde nubilum eam ferme inviſibilem reddidit; nec niſi margo boreus Lunæ per rimas nubium interdum traluxit, donec h. $11\frac{1}{2}$ tandem integra Luna per rareſcentes nubes apparens Eclipſim oſtendit adhuc unius digiti proxime, quæ ſenſim decreſcens plene finiit hora 11 46′ circa Claramontium, ac tum diameter Lunæ dimenſa in micrometro dedit 30′ 20″ fere.

Eclipſis Solis d. 3 Junii. 1742.

Kiĕn-Lung. a. 7 l. 5.

Mane.

Cœlum toto hujus Eclipſis tempore, ſubnubilum quidem, ſed adeo tenuiter, ut nihil inde impedita, imo potius adjuta ſit obſervatio, cum retuſo nimio ſplendore Solis per teleſcopium quidem commodius, ac ſine oculorum moleſtia inſpici potuerit, & in ſpecie intromiſſa margo Lunæ terminatior apparuerit. Initium Eclipſis non præciſe ſpectatum acciderit h. 6 37′, vel ſemi-minuto citius: nam h. 6 38′ notata eſt prima phaſis 12′ unius digiti obſcurati. Reliquæ phaſes notatæ, ut ſequuntur.

Temp. ver. mane.

			Immerſio.
6^h	42′	45″	Digito ſinico I
6	49	15	— — II

6^h	56′	0″	—	—	III
7	2	50	—	—	IV
7	10	0	—	—	V
7	18	0	—	—	VI
7	32	0	—	—	VII

Ad dig. VII hæſit Eclipſis per 3 min. temporis, fortaſſe uno, aut altero ſcrupulo eum ſupergreſſa.

Emerſio.

7	35	0	—	—	VII
7	48	30	—	—	VI
7	57	0	—	—	V
8	4	20	—	—	IV
8	11	40	—	—	III
8	18	30	—	—	II
8	25	30	—	—	I
8	33	0	Finis Eclip.		0

Erat in Sole inſignis macula a limbo orientali 2⅔ digitos ferme remota. Hanc attigit margo Lunæ h. 7 22′ 45″ & intra 20″ plene obtexit. H. 8 9′ 30″ eadem integra emerſit. Diametri Solis & Lunæ erant proxime, ut 17 ad 18.

Eclipſis Lunæ partialis d. 12 Novem. 1742.

Kien-Lung. a. 7 l. 10.

Veſpere.

Cœlo utcunque ſereno, ac tranquillo ſatis commode ſpectari potuit hæc Eclipſis a principio uſque ad finem. Penumbra erat modica, & umbra ſatis nigra, ſed margine inæquali.

Dia-

Diameter Lunæ in micrometro ante Eclipſim h. 6½ erat præciſe 34′ 0″ circa medium Eclipſis erat 34′ 30″ & in fine 34′ 50″.

Momenta horologii exacta fuerunt ad culminationes α Aquarii, Fomahant, α & γ Pegaſi, item caudæ Ceti.

In Obſervatorio publico.

Temp. ver.					*In Collegio noſtro.*		
6ʰ	50′	0″	Initium ad Cleoſtratum.	—	6ʰ	48′	0″
6	58	0	Umbra dig. ſinic. I	—	6	56	10
7	6	0	— — — II	—	7	4	25
7	16	0	— — — III	—	7	13	20
7	28	0	— — — IV	—	7	25	30
7	45	0	— — — V	—	7	39	40
8	6	0	Medium Eclipſ. V45′	—	8	3	40
8	27	0	— — — V	—	8	27	40
8	45	0	— — — IV	—	8	41	50
8	58	0	— — — III	—	8	54	0
9	6	0	— — — II	—	9	2	55
9	14	0	— — — I	—	9	11	10
9	22	0	Finis ad Beroſum.	—	9	19	40

Circa maculas Lunæ obſervatæ ſunt ſequentes phaſes.

6	52	0	Umbra ad Harpalum.
7	0	0	— Ad Ariſtarchum, & Platonem, quos
7	2	0	— Ambos totos tegit.
7	9	0	— Ad Ariſtotelem.
7	10	0	— — Timocharim.
7	11	0	— — Archimedem.

7^h	12′	0″	Umbra ad Pitheam.
7	15	0	— — Galilæum.
7	16	0	— — Keplerum.
7	18	0	— — Eratoſthenem.
7	20	0	— — Copernicum.
7	21	0	— — Poſſidonium.
7	23	0	— Ambos hos texit.
7	27	0	— Ad Manilium.
7	29	0	— — Menelaum.
7	31	0	— — Vitruvium.
7	32	0	— — Plinium.
7	40	0	— — Proclum.
7	43	0	— — Ariadæum.
7	48	0	— Texit M. Caſpium.
7	49	0	— Ad Promont. acutum.
7	51	0	— — Cenſorinum.
8	4	0	Prodit Galilæus.
8	6	0	Umbra ad Langrenum.
8	13	0	Prodit Keplerus.
8	16	0	Langrenus obtectus.
8	20	0	Item Goclenius.
8	25	0	Emerſit Ariſtarchus.
8	28	0	— Copernicus.
8	37	0	— Pitheas.
8	44	0	— Ariadæus.
8	45	0	— Timocharis.
8	47	0	— Cenſorinus.
8	49	0	— Promon. acutum.
8	50	0	— Manilius.
8	52	0	— Menelaus.

8	54	0	Emerſit Langrenus.
8	56	0	— Plato & Plinius.
8	58	0	— Taruntius.
8	59	0	— Vitruvius.
9	3	0	— Eudoxus.
9	4	0	— Ariſtoteles.
9	7	0	— Proclus.
9	9	0	— Poſſidonius.
9	14	0	— M. Caſpium totum.
9	16	0	— Endymion.

Eclipſis Lunæ partialis d. 21 Oct. 1744.

Kiĕn-Lung. a 9 l.

Veſpere.

In Collegio.

Temp. ver.			
7^h	5′	0″	Penumbra denſior.
7	6	0	Initium Eclipſis ad Byrgium. Tubo 8. ped.
7	11	50	Umbra ad centrum Schikardi.
7	16	50	— Ad Grimaldum.
7	20	0	— Ad centrum Grimaldi.
7	21	50	— Tegit Grimaldum totum.
7	22	0	— Tegit Ricciolum totum.
7	25	10	— Ad Tychonem, & centrum Gaſſendi.
7	27	10	— Tegit Tychonem totum.
7	29	20	— Tegit Bullialdum totum.
7	34	50	— — Galilæum totum.

7^h	38′	40″	Umbra tegit Keplerum totum.
7	50	10	— Ad Copernicum.
7	54	20	— Ad centrum Copernici.
7	59	40	— Tegit Copernicum totum.
8	9	40	— — S. Cyrillum totum.
8	11	30	Copernicus emergere incipit.
8	24	10	Mergitur S. Dionyſius.
8	26	45	Emergit Galilæus totus.
8	31	10	Mergitur Cenſorinus.
8	37	25	Emergit Ricciolus totus.
8	39	50	— Medius Grimaldus.
8	41	5	— Totus Grimaldus.
8	43	20	— Tandem Copernicus totus.
8	44	45	— Keplerus totus.
8	51	30	— S. Dionyſius totus.
8	59	50	— Cenſorinus totus.
9	5	30	— S. Cyrillus totus.
			Inde nubes addenſari.
9	17	30	Emergit Fracaſtorius totus.
9	28	20	— Medius Tycho.
9	30	30	— Tycho totus.
9	36	20	— Maginus totus.
9	48	50	Finis Eclipſis e regione Claramontii. Tempora exacta ad Solem in Meridie.

CAPUT II.

OCCULTATIONES STELLARUM A LUNA.

Anno 1718.

Mart. 25 mane

4^h $29'$ $30''$ Viſa eſt emergere ex Luna ſtella 4ᵗᵃᵉ magnitudinis in ♐, Bayero lit. ρ, Hevelio: *in faſcia præcedente media.* Immerſionem ejus non obtigit videre ob Lunam adhuc poſt ædes latentem. Locus Emerſionis erat in linea recta ducta a Galilæo per Inſulam Ventorum radendo auſtralem marginem Copernici. Item in alia recta ducta ab Ariſtarcho per ſectionem montis Apennini adhuc conſpicuo tractu lucentis in parte jam obſcura Lunæ, cujus phaſis etſi jam minor dichotoma, quam proxime conveniebat cum Phaſi 32ᵈᵃ, quam Hevelius in Selenographia exhibet, ſectione ſcilicet lucis & umbræ per easdem prorſus maculas tranſeunte.

April. 10 veſpere ante mediam noctem

11^h $10'$ $48''$ Luna obtexit ſtellam 4ᵗᵃᵉ magnitudinis in ♌, quam Bayerus notat litera ο, & Hevelius vocat: *in drace ſiniſtra ſequens.* Immerſio accidit inter octantes 7ᵐᵘᵐ & 8ᵛᵘᵐ prope Crugerum. Recta

enim linea a ſtella ducta hinc per centrum Copernici tranſibat per Eudoxum ſtringens marginem orientalem Zoroaſtri & Endymionis ; illinc per Bullialdum & Thebit inter S. Catharinam & Cyrillum, inter Wendelinum, & Langrenum excurrebat verſus Nodum occidentalem, ubi

April. 11 mane poſt mediam noctem.

0^h 9′ 50″ Emerſit rurſum ſtella, indeque recta una tranſibat Fracaſtorium, & Bullialdum, altera per Goclenium, Bedam, & Plinium. Sectio autem Gibbæ Lunæ tranſibat per medium ſinum Iridum inter Cuſanum, Milichium ſtringens Herigonium.

Octob. 10 mane

4^h 33′ 10″ Luna obtexit ſtellam μ in auſtrali lino piſcium, & Immerſio quidem facta proxime ad Nodum orientalem. Emerſio autem diſtingui non potuit ob ſpiſſiorem aerem & Lunam vergentem ad occaſum.

Octob. 11 mane poſt mediam noctem

12^h 45′ 45″ Luna obtexit ſtellam in Ceto ex iis, quas Bayerus notat litera ξ occidentaliorem, ſeu præcedentem. Immerſionis locum notat recta e Morino per Vietam ducta. Emergentem ſtellam ob aeris craſſitiem diſtinguere non licuit. Sed & tempus ab horologio ſignatum aliquid habet dubii.

Anno 1719.

Jan. 3 veſpere
7^h 11′ 15″ Accidit Immerſio Aldebaranni ſub ☾ e regione Seleuci, qui ſtabat in confinio lucis & umbræ recta ex Ariſtarcho per eum ducta. Emerſio accidit prope Firmicum, ſed non eſt præciſe viſa. Diameter Lunæ erat 31′ 40″.

Jan. 30 veſpere ante mediam noctem
11^h 21′ 48″ Luna texit ſtellam γ in ♉ ſeu Hyadum primam. Immerſio fuit prope Byrgium in recta ducta per Bullialdum & S. Dionyſium.

Jan. 31 mane poſt mediam noctem
12^h 14′ 6″ Eadem ſtella emerſit ex Luna proxime Furnerium, locum notante recta a Copernico per S. Catharinam.

Febr. 5 veſpere
9^h 3′ 0″ Stella A in ♌ ſubingreſſa eſt Lunam e regione inter Roccam, & Crugerum.
10 7 0 Iterum emerſit e regione Petavii.

Mart. 7 mane
4^h 25′ 45″ Luna occuluit alæ auſtrinæ virginis primam, Bayero β; Immerſionis locus erat e regione Galilæi ſupra Cavalerium.

5^h	25′	40″	Facta Emerſio in terra vigoris e regione Firn ci : quæ obſervatio optime concordat præv calculo.
Mart. 11			mane poſt mediam noctem
12^h	25′	0″	Luna occultavit lancem boream ♎, Bayero ɣ Immerſio facta proxime Byrgium, qui cum ſte la ac Bullialdo ſtabat in linea recta.
1	31	0	Accidit Emerſio exiſtente ſtella in recta cu Piccolomineo & Tychone; item cum Fracaſt rio, & Pitato. Sectio illuminatæ Lunæ qua proxime ſimilis erat Phaſi 16ta apud Heveliur
Mart. 26			veſpere, initio noctis ſtabat Luna in loco mediæ Hy dum ad auſtr. ſequent: quæ etiam vocatur dı plicata. Serius cœpi obſervare, quam ut Eme ſiones ſtellularum notare potuerim. Diamet Lunæ erat 30′ 40″ circiter.
8^h	32′	0″	Aldebaran diſtabat integra diametro Lunæ limbo obſcuro Lunæ.
9	50	40	Immerſio Aldebarani ſub Lunam terminantis r ctam per Poſſidonium, & Cleomedem ductam.
10	29	30	Prodiit rurſum Aldebaran ex Luna in recta pe Atlantem, & Eudoxum, qui poſterior ſtab adhuc in umbra ad lucem confini. Ob modica horologii tardationem poſſunt ſummi pro Imme ſione ſcrupula præciſe 51′ & pro Emerſione 30

valde

valde bene concordat hæc occultatio cum prævio calculo & figura.

April. 1 veſpere facta eſt occultatio ſtellæ A in ♌ ſub Luna.

7^h	31′	0″	Fuit ingreſſus in linea recta per Gaſſendum, & Alphonſum.
8	42	0	Fuit egreſſus paulo infra Wendelinum in recta cum Goclenio, Cenſorino, & Menelao.

Maji 1 mane ſtatim poſt mediam noctem

1^h	40′	0″	Præciſe accidit Immerſio ſtellæ β in ♍ ſub Luna e regione inter Grimaldum, & Roccam.
2	35	0	Facta eſt Emerſio e regione Wendelini.

Maji 5 mane poſt mediam noctem

2^h	3′	30″	Accidit Immerſio ſtellæ ν in ♎ ſub Luna. Locus Immerſionis erat proxime e regione Crugeri.
3	18	0	Emerſit proxime Nodum occidentalem.

Julii 7 mane poſt mediam noctem

1^h	6′	0″	Occultavit Luna ſtellam in quadrato extremæ caudæ Ceti præcedentem e ſuperioribus. Locus Immerſionis fuit paulo infra Byrgium.
2	14	20	Accidit Emerſio in recta linea a Grimaldo per Abilſedeam prope Nodum occidentalem.

3^h 32′ 30″ Occultata eſt ſtella ſequens e ſuperioribus in eodem quadrato Hevelium inter & Ricciolum. Emerſio claro jam die viſa non eſt.

Aug. 10 mane

4^h 18′ 0″ Subingreſſa eſt Lunam proxime ad Ricciolum, in recta per eundem ex Reinoldo, ſtella borealior duarum, quæ conſtituunt θ in Hyadibus. Et 5′ 30″ poſt, nimirum

4 23 30 Ingreſſa eſt auſtralior earum inter Crugerum, & Eichſtadium terminans rectam ex Keplero per Crugerum.

Anno 1720.

Febr. 25 veſpere ſtella σ in ♌ occultata eſt a Luna.

10^h 24′ 0″ Accidit Immerſio in recta ex Capuano ſtringente orientalem marginem Schikardi.

11 5 30 Emerſit prope Claramontium in recta ex Cenſorino per Fracaſtorium.

Mart. 23 mane

3^h 38′ 30″ Immerſio ſtellæ χ in ♌ ſub Luna in recta ex Copernico per borealem partem Ariſtarchi ducta, ſupra Nodum orientalem. Emerſio videri non potuit ob Lunam jam nimis profundam.

Maji 15 veſpere accidit occultatio Reguli ſeu α ♌ ſub Luna.

8^h	16′	30″	Facta eſt Immerſio e regione Byrgii ac Vietæ.
9	16	0	Præciſe facta Emerſio e regione Fernerium inter & Petavium. Luna apparebat perfecte dichotoma.

Nov. 18 mane mox poſt mediam noctem

0^h	26′	0″	Ingreſſa eſt poſt Lunam ſtella præcedens in clava Orionis in recta ex Platone per Philolaum.
0	52	0	Prodiit eadem in recta ex Poſſidonio per Atlantem & Endymionem. Tum mane ſub auroram
6	20	0	Abſorpta a Luna fuit ſtella ſequens in eadem clava directe e regione Grimaldi.

Dec. 6 veſpere tranſiit Luna ſupra ſtellas ψ in ♒.

9^h	10′	0″	Circiter obtexit earundem borealem. Præciſe enim videre neglexi.
10	10	0	Accidit Emerſio in recta ex S. Catharina per Petavium.

Anno 1721.

Dec. 4 veſpere

7^d	54′	0″	Subintravit Lunam cornu auſtrale Tauri notatum lit. ζ prope Xenophanem.
8	40	30	Prodiit prope Senecam, & Plutarchum.

Anno 1722.

Januar. 26 veſpere ſub mediam noctem tranſiit Luna ad triplicem ſtellam δ in capite Tauri, & ipſa media nocte

0^h	$0'$	$0''$	Circiter texit earum ultimam ac borealiorem in recta per Bullialdum, Ptolomæum & Ariadæum. Item in recta ex Tychone ſtringente Haſſum. Poſt 52′ nempe
0	52	0	Prodiit in recta ex Copernico per Petavium.

Sept. 24 veſpere Luna occultavit ambas auſtrales ſtellas in quadrato caudæ Ceti. Occidentalioris occultatio videri non potuit propter nubes.

9^h	$19'$	$0''$	Subintravit Lunam orientalior in recta ex Ariſtarcho per montem Anonymum inter Cardanum & Seleucum.
10	32	0	Prodivit eadem ſtella ex Luna in recta ex Cenſorino per Firmicum.

Dec. 15 veſpere Luna occultavit ſtellas duas auſtraliores in parvo quadrato ſupremæ caudæ Ceti.

6^h	$44'$	$45''$	Accidit Immerſio præcedentis in recta per Aratum ferme & Julium Cæſarem.
7	45	0	Fuit ejuſdem Emerſio quam proxime prope Plutarchum in recta ex Plinio ſtringente mare criſium.
8	36	0	Contigit Immerſio ſequentis, ubi a media diſtantia inter utrumque cornu Lunæ ſtella modice ver-

gebat ad auſtrum. Adeoque ingreſſa fuerit prope Ricciolum.

9^h 43′ 30″ Obſervata fuit ejuſdem ſequentis Emerſio in recta ex S. Catharina per Wendelinum.

Pro correctione penduli horologii obſervata eſt altitudo Capellæ, ut ſequitur: 7^h 55′ alt. 57° 52′ 8^h 38′ alt. 59° 30′ deniqne 9^h 53′ alt. 72° 36′.

Luna tum erat dichotoma, quam proxime ſimilis phaſi, quæ in Selenographia Hevelii notatur num. 11. Margo illuminationis ſtringebat orientem Metonii, Arati, Albategnii, Werneri, Nonnii &c. & Curtii. Occidentem vero Ariſtilli, Autolici, Blanchini, Fernerii, Magini &c.

Anno 1723.

Jan. 17 veſpere Luna texit ſtellam *i* in cornu auſtrali Tauri.

7^h 8′ 30″ Immerſio in recta ex Archimede per Ariſtarchum nondum quidem illuminatum, ſed proximum termino illuminationis. Emerſio ob denſiorem nebulam atque halonem videri non potuit.

Jan. 21 veſpere Luna occultavit aſellum boreum γ in ♋.

9^h 11′ 0″ Facta eſt Immerſio prope Cardanum, in eadem fere diſtantia inter Grimaldum & Ariſtarchum.

10^h 14′ 30″ Fuit Emerſio in recta ex Proclo per Firmicum in terra Vigoris.

Febr. 10 veſpere Luna occultavit ſtellas duas in capite Ceti. (Hevelio Occiput, Bayero ξ occidentalior cum anteambula ſtella minore, quæ a majore ſequente diſtat 26′ 50″).

8^h 47′ 0″ Accidit Immerſio minoris ſeu præcedentis in recta per Fracaſtorium & Wendelinum.

9 37 0 Fuit Immerſio majoris & ſequentis in æquali quam proxime diſtantia ab extremis cornibus illuminatis. Emerſiones videre non licuit Luna in occaſum vergente, & nebuloſo aere obvelata.

Mart. 27 veſpere ante mediam noctem Luna occultavit ſtellam β in fronte ♏.

11^h 23′ 0″ Immerſio in recta ex Keplero per medium Grimaldi. Libratio erat quaſi maxime orientalis.

Mart. 28 mane poſt mediam noctem

0^h 32′ 0″ Emerſit eadem ſtella in recta ex Copernico per Plinium.

Maji 14 veſpere ante mediam noctem Luna occultavit ſtellam ν in capite ♍.

11^h	$15'$	$0''$	Quam proxime facta Immerſio; non poterat enim præciſe notari momentum Immerſionis ob vaga nubila intervolantia; differentia tamen vix poterit eſſe ultra minutum. Paulo ante erat ſtella in recta cum Copernico & Manilio.

Jun. 16 veſpere ſub mediam noctem Luna occultavit ſtellam ω borealiorem in ♏.

10^h	$53'$	$0''$	Facta Immerſio in recta per Blancanum ex Tychone.
11	27	0	Facta Emerſio prope Claramontium.

Sept. 13 veſpere ſub mediam noctem Luna texit ſtellam τ in ♒.

10^h	$46'$	$0''$	Fuit Immerſio in recta per Ariſtarchum ex monticulo anonymo, qui eſt inter Copernicum & Reinoldum.
11	54	0	Fuit Emerſio in tranſitu directo maris criſium ex Proclo. Libratio fere maxima ad mare criſium.

Anno 1724.

Febr. 11 veſpere

10^h	$18'$	$0''$	Luna obtexit ſtellam ν in capite ♍, loco Immerſionis in recta ex Ariſtarcho per Seleucum. Tum
11.	15	0	Prodiit ſtella in recta ex Vitruvio inferius Cleomedem tangente.

Oct. 24 veſpere
9^h 13′ 0″ Luna occultavit ſtellam ω in ♐, nec quidquam ultra ſpectari potuit Luna ad horizontem depreſſa.

Nov. 3 mane ſtella υ ſequens ſupra oculum ſiniſtrum ♉ obtecta fuit a Luna.
5^h 10′ 0″ Facta Immerſio e regione Phocyllidis.
6 0 0 Præciſe prodiit rurſum ex Luna e regione Furnerii.

Dec. 6 mane poſt mediam noctem
2^h 3′ 0″ Stella ν in ♌ ingreſſa eſt poſt Lunam in recta ex Pitato per Byrgium. Tum
3 13 0 Emerſit in recta ex Copernico per S. Theophilum, qui tum erat in termino illuminationis.

Anno 1725.

Febr. 17 veſpere
6^h 50′ 5″ Luna obtexit ſtellam ο in Lino ♓. Locus Immerſionis in recta a Langreno per marginem illuminationis proxime ad Cardanum.
7 57 10 Emerſit ſtella in recta ex margine boreo Goclenii per medium ejuſdem ducta.

Dec. 16 veſpere

9^h

9^h $49'$ $0''$ Luna occultavit ſtellam π in ♈. Locus Immerſionis erat in recta ex Copernico per limitem boreum Ariſtarchi.

10 54 30 Circiter acciderit Emerſio. Nam non citius diſtinxi ſtellam, quam jam 3 minutis a limbo Lunæ diſtantem, erat autem jam tum hora quaſi 11ma. Porro locus Emerſionis infra mare criſium e regione Firmici. Poſt mediam noctem 1^h $30'$ circiter Luna pariter obtexit ſtellam duplicem ρ in ♈. Sed tentante ſomno neglexi obſervationem paulo tardius ſuperveniens.

Anno 1726.

Jan. 9 veſpere

6^h $0'$ $50''$ Subiit Lunam ſtella præcedens borea quadranguli, quod eſt ſupra caudam Ceti, in recta per S. Cyrillum, & Langrenum ducta: item in alia recta per Plinium, & Cleomedem.
Emerſio ſtellæ præciſe viſa non fuit.

6 32 0 circiter emerſerit ad Schombergerum, a quo tum vix uno minuto diſtabat. Diameter Lunæ erat $30'$ $38''$. Sequens borea non ſubiit Lunam, ſed uno aut ſeſquiminuto ad ſummum tranſiit ad auſtralem limbum Lunæ, ſtabatque

8 39 0 In eadem recta cum extremitate cornuum Lunæ. Alia autem parvula ſtella borealior iſta ſubiit Lunam

8^h	27′	0″	In recta per Plinium, & marginem boreum maris criſium.

Jan. 13 veſpere tranſiit Luna per ſtellas in cauda ♈, & ſtella quidem δ adhuc de die obtecta fuit a Luna. Stella ξ procul ad boream tranſiit. Ex ſtellis autem τ ſequentibus Luna obtexit duas auſtraliores.

9^h	35′	30″	Immerſit illarum præcedens ſtans in linea recta per centrum Copernici inter Langrenum & Wendelinum producta, alia parallela per Platonem & Poſſidonium tranſeunte. Et tum ſtella borea τ diſtabat a cornu boreo Lunæ 19′ 37″.
10	25	30	Immerſit auſtralium ſequens, ſtans in recta per Copernicum ſtringente auſtrale littus maris criſium, alia parallela tranſeunte per Platonem & Ariſtotelem. Et tum ſtella τ borea diſtabat a margine boreo Lunæ 23′ 55″.
10	44	0	Prior ſtella emerſit proxime ad mare criſium in recta per Soſigenem & Copernicum, diſtante tum ſtella borea τ a margine Lunæ 29′ 0″ denique
11	35	30	Emerſit altera ſequens paulo infra Firmicum in recta ex Copernico Taruntium ad auſtrum ſtringente. Diameter Lunæ erat 32′ 25″. Diſtantia ſtellæ τ boreæ ab auſtrali præcedente erat 31′ 11″, duarum auſtralium inter ſe 22′ 50″.

Febr. 24 mane poſt mediam noctem

1^h	$42'$	$0''$	Circiter prodiit ſtella σ in ♏ ex parte obſcura Lunæ, a qua fuerat occultata ante ortum.
5	40	0	Immerſit cor Scorpii, ſive α ♏ ſub Lunam proxime Roccam in recta ex Copernico per Grimaldi cuſpidem auſtralem. Emerſio videri non potuit orto jam ſole.

Mart. 11 veſpere Luna occultavit ſtellam borealiorem ceteris in Trapezio ſub pedibus Aurigæ.

10^h	$16'$	$25''$	Stella Immerſit ſtans in recta per Maginum, & Furnerium.
11	36	30	Emerſit in recta ex Ptolomæo per Piccolomineum.

Oct. 11 mane poſt mediam noctem Luna occultavit ſtellam ν in ♊.

1^h	$59'$	$35''$	Accidit Immerſio proxime Oenipodem in recta linea per Eratoſthenem ſtringente latus Ptolomæi Occidentale. Emerſionem æſtimavi accidiſſe.
2	38	30	Nam 2′ circiter minutis tardius acceſſi, poſtquam ſtella jam egreſſa ſtabat in recta cum Ariſtillo, & Ariſtarcho.

Dec. 16 mane

5^h	$59'$	$45''$	Emerſit ſtella β in ♍ de ſub Luna in linea recta ex Galilæo per Copernicum.

Anno 1727.

Febr. 1 mane			mox a media nocte tranſivit Luna per Plejadas. Diameter Lunæ erat 31′ 16″. Sub mediam noctem appropinquabat Luna ad Plejadas, quarum maxime occidentalem & auſtralem (Electram) proxime reliquit ſupra ſe ad boream, &
0^h	0′	0″	Stabat hæc in linea recta per cuſpides illuminationis.
0	2	0	Stabat in linea recta cum Platone & Ariſtotele.
0	6	0	In recta cum Platone, & Copernico diſtans ab hoc 15′ 35″.
0	20	0	In recta cum Ariſtotele & Copernico diſtans ab hoc 18′ 20″.
0	6	25	Subierat Lunam auſtralium ſequens (Meropë) in recta ex Plinio ſtringente Copernicum ad boream.
1	0	30	Emerſit eadem paullo infra Plutarchum proxime mare criſium, quod erat in maxima libratione occidentali.
0	49	25	Subierat Lunam lucida Plejadum (Alcinoë) in recta per Eratoſthenem, & Petavium. 8″ autem vel 10″ ſecundis ante ejus Immerſionem diſparuit lucula ex 3 ſtellulis eam præcedentibus inſtar unius ſtellulæ relucens.
1	21	40	Emerſit Alcinoë inter Endymionem, & Mercurium.
1	19	40	Immerſerat Atlas, &
1	28	8	Immerſit Pleyone.

Febr. 8 mane poſt mediam noctem

1^h $0'$ $35''$ Stella χ in ♌ occultata fuit a Luna prope Crugerum.

2 14 50 Emerſit eadem contra medium littus orientale maris criſium. Diameter Lunæ $33'$ $18''$.

April. 3 veſpere ſub mediam noctem

11^h $24'$ $5''$ Luna obtexit eandem ſtellam χ in ♌. Locus Immerſionis erat in linea recta cum Keplero, & Landſpergio, & in æquali diſtantia a Galilæo, & Ariſtarcho.

April. 4 mane poſt mediam noctem

12^h $15'$ $0''$ Aut paululum ante emerſit eadem ſtella in recta ex Poſſidonio per Mercurium.

Oct. 21 veſpere Luna texit ſtellas ω & A in trapezio ♐ borealiores, ſed occultatio ſtellæ ω accidit de die, & Emerſio non multo poſt occaſum Solis.

Stella autem A immerſa eſt.

6^h $1'$ $2''$ In recta per Cyrillum, & Langrenum. Emerſitque

6 57 30 In recta ex Maurolyco per Pitiſcum.

Oct. 31 mane poſt mediam noctem

2^h $4'$ $45''$ Subingreſſa eſt Lunam ſtella ε in ♈. Locum Im-

merſionis deſignabat recta cum Ecphanto, & Pithea. Tempus Emerſionis præciſe notatum non fuit, ſed $3^h\ 7'$ apparuit ſtella jam paullum remota a limbo. Eodem autem die

Oct. 31 veſpere inſignis tranſitus Lunæ per medium Plejadum. Nimirum

9^h	$2'$	$22''$	Immerſio Electræ in recta cum Seleuco, & Ariſtarcho prope Cardanum.
9	22	35	Immerſio Celænûs contra Harpalum, & Sinum Iridum.
9	50	25	Immerſio Majæ ad Xenophanem in recta cum Ariſtarcho, & Keplero.
9	56	50	Immerſio Meropes in recta ex Tychone ſtringente extremitatem Schilleri occidentalem.
10	5	0	Emerſio Celænûs ad boream maris criſium prope Plutarchum.
10	9	15	Emerſio Electræ contra Langreni extremitatem boream.
10	13	30	Emerſio Meropes in recta ex Tychone inter Cabeum & Caſat.
10	32	10	Immerſio Alcinoës in recta ex Tychone inter Schikardum & Phocyllidem.
10	45	0	Emerſio Majæ contra medium mare criſium.
10	5	30	Emerſiſſe judicata fuit Alcinoë, & ob volaticas nubes non poterat locus diſtingui. Fuerit circa Mancinum & Schombergerum.

monatl. corr. I, 245.

Dec. 21 veſpere ſub mediam noctem

11^h	34′	0″	Stella δ in ♓ abſorpta fuit vel ab ipſo margine Lunæ, vel ab undulante luce marginis lucidi Lunæ.
11	53	0	Apparuit ſtella in recta per Poſſidonium, & Soſigenem a margine Lunæ tantum ferme diſtans, quantum Hercules ab eodem margine.

Anno 1728.

Jan. 2 mane poſt mediam noctem Luna texit ſtellam *c* in ♌.

2^h	35′	20″	Accidit Immerſio in recta per Tychonem, & S. Theophilum.
3	20	40	Facta Emerſio in recta per S. Theophilum, & Eratoſthenem.

Jan. 22 mane poſt mediam noctem tranſitus Lunæ ad Plejadas.

1^h	0′	25″	Immerſio Taigetæ in recta per Bullialdum, & Abilfedeam.
1	9	30	Celœno in recta ex Tychone per medium Clavium ſtabat in cuſpide auſtralis illuminationis, pauculis tantum ſecundis diſtans a margine, nec poſtea comparuit ob fluctuationem limbi lucidi Lunæ.
1	18	24	Immerſio Aſteropes in recta per Bullialdum & Fracaſtorium.
1	25	56	Immerſio Majæ in recta ex Tychone per medium Longomontani. Emerſio autem nullius videri potuit, ob nimis fluctuantem limbum lucidum Lunæ horizonti imminentis.

Jan. 29 veſpere

9^h	27′	53″	Luna texit ſtellam τ in ♌ in recta per Galilæum, Landſpergium: item in alia per Ariſtarchnm & Platonem.
10	24	17	Facta Emerſio ad boream maris criſium in recta cum Macrobio & Soſigene.

Mart. 21 veſpere Luna occultavit ſtellam γ in ♋.

8^h	14′	0″	Facta Immerſio in recta per Copernicum, & marginem boreum Langreni. Emerſio neglecta. Acciderit 9^h 15′ circiter. Dein
9	29	0	Erat ſtella in recta cum Poſſidonio, & Bullialdo. Item cum Atlante & Copernico diſtans ab hoc 21′ 40″.

Maji 24 mane poſt mediam noctem

1^h	51′	30″	Circiter abſorpſit Luna ſtellam τ in ♏ proxime Byrgium. Emerſio non fuit obſervata.

Sept. 14 veſpere

8^h	11′	20″	Immerſio ſtellæ ν in ♐ poſt Lunam inter Seleucum, & Cardanum. Tum
9	37	30	Emerſio paulo infra Langrenum ad Nodum occidentalem.

Oct. 28

Oct. 28 mane poſt mediam noctem Luna occultavit Regulum ſeu α ♌.

1^h 39′ 50″ Immerſio in recta ex Gaſſendo per Ariſtarchum.

2 11 15 Emerſio in recta ex Cardano per Ariſtarchum.

Nov. 24 mane Luna texit ſtellam ν in ♌ proxime contra Roccam.

5^h 0′ 42″ Facta eſt Immerſio. Tum

6 21 55 Emerſio in recta cum Reinoldo, & Grimaldo prope Beroſum, fuitque tranſitus ferme centralis.

Anno 1729.

Mart. 8 veſpere ſub mediam noctem Luna obtexit ſtellam borealiorem, & orientaliorem trapezii, quod eſt infra pedem Aurigæ.

11^h 48′ 0″ Facta eſt Immerſio.

Mart. 9 poſt mediam noctem

0^h 12′ 0″ Emerſio e regione Meſſalæ.

Mart. 11 veſpere

7^h 56′ 30″ Immerſio ſtellæ η in ♋ a Luna contra Schikardum in recta per Bullialdum & Endymionem. Emerſio non fuit animadverſa, niſi 9^h 2′ 30″ accidit autem circiter 1′ vel 2′ ante h. 9 contra Petavium.

April. 2 veſpere			tranſivit Luna ad boream Plejadum, quarum aliquas occultavit.
8^h	32′	2″	Obtexit borealiorem trianguli, quod ad occidentem præcedit Plejadas. Stellula eſt parva, & objacet Taigetæ. Locus Immerſionis videbatur contra Phocyllidem.
9	2	23	Luna abſorbuit ſtellam in claritate Celæno ſupparem, quæ eſt ad boream Taigetæ, & cum hac ad Aſteropen ferme angulum rectum conſtituit. Locus Immerſionis videbatur eſſe contra Cardanum.
9	9	25	Obtexit ipſam Taigetam, cujus Immerſio erat proxime ad cuſpidem cornu auſtralis contra Cabeum ferme.
9	18	58	Obtexit Aſteropen ſeu clariorem duarum. Immerſio videbatur eſſe contra Bartolum.
9	25	23	Obtexit proxime ſequentem minorem duarum. Immmerſio fuerit prope Caſatum. Cœperat tum Luna horizonti propinquare, & lucidus ejus limbus nimium undulare. Quare Emerſiones non poterant jam videri, nec ipſius Taigetæ, quæ poſt h. 9½ videbatur ſubobſcure contra Petavium prodiviſſe, diſtincte tamen non apparebat.

April. 11 veſpere			occultatio ſtellæ υ in ♌ ſub Luna.
8^h	12′	0″	Præciſe fuit Immerſio, & directe contra Schikardum, ſtante Meſſalla in vertice Lunæ.

9^h	$11'$	$30''$	Facta Emerſio paulo infra Langrenum ſtante Mercurio in vertice Lunæ.

Nov. 7 mane inſignis rurſum tranſitus Lunæ per Plejadas.

4^h	$51'$	$10''$	Immerſio Celænûs contra Zucchium.
4	53	6	Immerſio Taigetæ contra Crugerum.
5	17	30	Immerſio præcedens Aſteropes ad Riccioli apicem boreum.
5	18	20	Immerſio Majæ contra marginem orientalem Schikardi.
5	21	0	Immerſio ſequens Aſteropes contra Roccam. dubia nonnihil.
5	37	10	Emerſio Celænûs recta contra Petavium.
6	2	20	Emerſio Taigetæ media diſtantia inter Langrenum & mare criſium.
6	15	30	Emerſio Majæ paulo ad boream Wendelini.

Nov. 7 veſpere

7^h	$30'$	$34''$	Immerſio ſtellæ χ in ♉ paulo ad auſtrum Galilæi.
8	33	15	Emerſit rurſum ſtella paulo ad boream Langreni.

Nov. 26 veſpere

7^h	$42'$	$0''$	Parva ſtella, quæ videbatur eſſe μ in ♑ ſubiit Lunam in recta ex Petavio per S. Catharinam.

8^h	22′	0″	Alia ſtella minor ſubiit Lunam a priore nonnihil auſtralius. Emerſiones ad limbum lucidum Lunæ videri non potuerunt.

Anno 1730.

Jan. 28 mane illico poſt mediam noctem Luna ad Plejadas.

0^h	0′	40″	Immerſit Taigeta in recta ex Ariadæo per Alphonſum prope Vietam.
0	17	45	Quaſi eodem momento obtectæ a Luna, tum quæ eſt ſupra Plejadas a Taigeta ad boream, tum Aſteropes præcedens; illa in recta ex Manilio per Timocharim; hæc in recta ex Cenſorino per Alphonſum.
0	22	40	Immerſit Aſteropes ſequens paulo auſtralius a præcedente, ferme ut Taigeta
0	37	0	Maja cœpit radere cuſpidem auſtralem Lunæ, ac tandem
0	39	50	Prope Malapertium penitus diſparuit. Sed ea
0	51	30	rurſum prodiit in recta ex Tychone per marginem ſuperiorem Magini. Non latuit adeo 12 integris minutis.
0	52	30	Uno minuto poſt Majam apparuit quoque prodire Taigeta e regione Petavii.
			Aliarum Emerſiones non fuerunt obſervatæ.

Maj. 22 veſpere

8^h	54′	0″	Obtecta fuit a Luna ſtella ϑ in ♋. Immerſio

erat in recta per S. Theophilum, qui erat in margine illuminationis cum Petavio.
Emerſio accidit opinione citius, & prope cuſpidem boream; proinde tardius animadverſa.

Nov. 14 circa hor. 4^{tam} pomeridianam Luna obtexit ſtellam ♂ Martis, qui tamen ob diei claritatem teleſcopio detegi non potuit. Viſa tamen
4^h $54'$ $0''$ Ejuſdem de ſub Luna emerſio.

Nov. 17 veſpere poſt
10^h $30'$ $0''$ Cœpit ſtella ♃ in ♒ proxime radere limbum auſtralem obſcurum Lunæ, quin tamen ſub eum ſe conderet. Nam ab
10 45 0 cœpit iterum ſenſim ab eodem recedere, ac
10 55 0 tandem ſtetit ad cuſpidem auſtralem proxime Cabeum vix uno minuto diſtans a margine Lunæ.

Dec. 29 mane Luna texit ſtellam π in ♌. Sed Immerſionem videre neglexi.
5^h $3'$ $15''$ Accidit ejus Emerſio in recta ex Tychone per Fracaſtorium.

Anno 1731.

Jan. 17 Inſignis iterum tranſitus Lunæ per Plejadas.

10^h	9′	40″	Veſpere Immerſit Electra in recta cum Platone & Eudoxo.
10	32	52	Immerſit Merope in recta cum Meſſala & Copernico.
10	38	15	Emerſit Electra in recta cum Thalete, & Eudoxo.
11	23	52	Immerſit præcedens lucidam Plejadum (alias triplex ſtellula) in recta cum Eratoſthene & S. Cyrillo.
11	26	5	Immerſit lucida Plejadum ſeu Alcinoë in recta cum Copernico & S. Catharina.
11	47	32	Emerſit Merope in recta per Taruntium & S. Theophilum.

Jan. 18 mane poſt mediam noctem

0^h	1′	10″	Immerſit lucidior e parvis ab Atlante ad auſtrum in recta cum Bullialdo & Cenſorino.
0	12	12	Immerſit Atlas in recta cum Copernico, & Julio Cæſare.
0	13	57	Emerſit Alcinoë in recta cum margine ortivo Poſſidonii, & Menelao.
0	25	3	Immerſit Plejone in recta cum Copernico, & Ptolomæo.

Mart. 20 veſpere ſub mediam noctem

11^h	13′	0″	Immerſit ſtella π in ♌ ſub Lunam in recta per Merſennum, & Bullialdum.

Mart. 21 mane mox a media nocte			
0^h	$31'$	$0''$	Emerſit eadem proxime contra Firmicum.
April. 16 veſpere			
8^h	$46'$	$30''$	Immerſit ſtella *o* in ♌ prope Byrgium in recta per Bullialdum ſtringente marginem auſtralem Cenſorini.
10	5	45	Emerſit eadem ſupra Langrenum in recta per Taruntium, & Menelaum.
Nov. 9 veſpere.			
8^h	$59'$	$50''$	Luna occultavit ſtellam χ in ♓. Locus Immerſionis in recta cum Bullialdo & Fracaſtorio. Emerſionem videre impediit nebula. Quæ a dicta ſtella ad auſtrum prope abeſt minor, circa
9	30	0	Proxime raſit marginem auſtralem obſcurum Lunæ, ac demum
9	40	0	Stetit in recta linea per Tychonem, & Grünbergerum a cuſpide auſtrali pauculis minutis diſtans.
Nov. 16 veſpere			Luna obtexerat Propodem, ſed ejus Immerſio videri non poterat propter nubes.
9^h	$4'$	$0''$	Emerſit de ſub Luna Propus, contra mare criſium in recta per Proclum, & Menelaum.

Nov. 17 mane

6^h $54'$ $30''$ Luna obtexit ſtellam μ in ♊. Immerſio fuit contra Chriſtmannum, qua reſpicit Vietam. Emerſionem videre impediit nebula.

Nov. 24 mane ſtella ϵ in pede ♌ emerſit ex parte obſcura Lunæ proxime Petavium.
Immerſio non fuit obſervata.

Dec. 21 mane poſt mediam noctem

1^h $5'$ $25''$ Luna obtexit ſtellam ϵ in pede ♌. Locus Immerſionis in recta ex Bullialdo per Schikardi cuſpidem occidentalem.

1 57 5 Emerſit ſtella in recta ex Grimaldo per Albategnium, paulo ad auſtrum Langreni.

Anno 1732.

Febr. 3 veſpere

7^h $42'$ $38''$ Luna obtexit ζ in cauda ♈. Locus Immerſionis in recta per Proclum, & Theonem Sen. contra Phocyllidem, & Schikardum.

8 42 40 Emerſit eadem contra Petavium.

Febr. 6 veſpere Luna obtexit Propodem ♊.

6^h

6^h 24′ 15″ Facta Immerſio in recta per Reinoldum & Plinium proxime Ricciolum.

7 52 0 Emerſio in recta per Ariadæum ſtringente Promontorium acutum.

Febr. 7 mane poſt mediam noctem obtexit Luna ſtellam η in calce Caſtoris; ſed Immerſio non eſt viſa.

2^h 4′ 0″ Facta eſt Emerſio paulo ad auſtrum Furnerii.

Mart. 2 veſpere Luna texit parvam ſtellam ſatis lucidam in ♉, quæ interjacet inter Plejadas & A ſtellam.

8^h 27′ 20″ Immerſit ſtella in recta per Langrenum & S. Theophilum.

9 35 0 Emerſit contra Firmicum.

Jul. 1 veſpere

8^h 10′ 42″ Luna obtexit ſtellam e in pede ♌. Immerſio erat in recta per Platonem, & Calippum.

Ad obſervandam Emerſionem ſero venimus occupati in obſervando tranſitu ſpicæ ♍ per meridianum ad corrigendum horologium.

Emerſit autem ſtella proxime

8 30 0 directe ſupra Ariſtotelem & Eudoxum perſtricto modico ſegmento Lunæ.

Jul. 7 veſpere ſub mediam noctem

11ʰ 48′ 40″ Luna texit ſtellam ο in capite ♐ recta contra Byrgium. Tum

Jul. 8 mane mox a media nocte
0ʰ 42′ 40″ Emerſit eadem in recta per Merſennum & Tychonem.

Aug. 31 veſpere ſub mediam noctem
10ʰ 10′ 35″ Luna texit ſtellam π in capite ♐ in recta per Copernicum, & Plinium.
11 22 30 Prodiit ſtella π inter Petavium, & Furnerium.

Sept. 24 veſpere
7ʰ 20′ 15″ Luna texit ſtellam δ in fronte ♏ in recta per S. Theophilum, qui tum erat in extremitate illuminationis & Petavium. Emerſio poſt h. 8vam non potuit videri ob nimiam Lunæ profunditatem & viciniam horizontis.

Oct. 2 veſpere ante mediam noctem
10ʰ 40′ 20″ Immerſit ſtella χ in ♓ recta contra Hevelium.
10 44 20 Immerſit ſocia ejus ſtella auſtralior contra Vietam.
10 47 50 Lunæ margo orientalis tranſiit meridianum.
11 52 0 Proxime emerſit ſtella χ paulo ſupra Petavium, quo tempore culminationi caudæ Ceti intendimus; ſtella auſtralior multo citius emerſerat,

non tamen viſa, niſi poſt culminationem caudæ Ceti. Quando jam 2 digitis ferme diſtabat a margine Lunæ infra Furnerium, quaſi in ipſo verticali per centrum Lunæ.

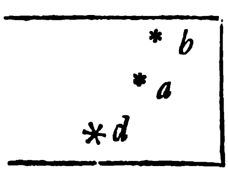
Anno 1733.

Oct. 14 veſpere Luna texit ſtellam, quæ borealem μ in arcu ♐ ſequitur ultra Colurum ad orientem; vide Flamſtedii Zodiacum ſtellatum.

$8^h\ 0'\ 30''$ Facta eſt Immerſio. Emerſio non eſt viſa ob Lunam nimis depreſſam.

Oct. 15 veſpere

$8^h\ 42'\ 45''$ Luna obtexit ſtellam *d* in ♐. Immerſio fuit in recta per Ariadæum & boreum marginem maris criſium.



Hanc ſtellam ſequuntur duæ parvulæ paulo borealiores, ut hic ad latus poſitæ *a*, & *b*.

$8^h\ 48'\ 50''$ Subiit Lunam harum auſtralior *a*. Et

$9\ \ 2\ \ 45$ Subiit eandem borealior *b*, quaſi in medio ſitu inter ambo cornua Lunæ.

Oct. 27 mane poſt mediam noctem Luna texit ſtellam χ in clava Orionis.

2^h $23'$ $25''$ Immerſit ſtella recta contra medium Grimaldum, qui erat valde vicinus margini ortivo. Emerſio non eſt animadverſa; ſed ſemi-quadrante ante h. 4^{tam} matutinam ſtella erat in recta per Plinium & Eratoſthenem, videbaturque trajeciſſe Diametrum Lunæ proxime.

Nov. 27 mane ſub auroram

6^h $7'$ $20''$ Immerſit ſub Lunam ſtella ω in ♌ prope Cleoſtratum.

6 41 0 Emerſit in recta per Platonem ad Ariſtarchum.

Dec. 10 veſpere Luna obtexit duas parvulas ſtellulas a β ♑ verſus ſtellas τ ad ortum ſitas in diſtantia duplicis diametri Lunæ circiter. Ipſæ ſtellulæ inter ſe diſtant paulo plus ſemidiametro Lunæ.

5^h $53'$ $0''$ Subiit Lunam auſtralis præcedens.

6 24 0 Intravit eandem borealis ſequens.

Dec. 16 veſpere poſt h. 9 Luna ſenſim appropinquabat ſtellæ π in Lino ♓ &

9^h $40'$ $0''$ Erat in recta per Tychonem & medium clavium proxime adhærens termino illuminationis in cuſpide auſtrali; incertum tamen, an Lunam ſolum raſerit, an omnino poſt eam ſe condiderit, quia ob frigus abrupta fuit ulterior obſervatio.

Anno 1734.

Fabr. 13 veſpere Luna tranſiit per ſtellas χ in clava Orionis, quarum auſtraliores occultavit. Auſtralis præcedens immerſit de die. Auſtralis ſequens immerſit
10^h $5'$ $20''$ in recta per Bullialdum & Firmicum. Emerſio ad limbum lucidum neutrius fuit obſervata.

Febr. 25 mane
4^h $45'$ $45''$ Immerſit ſtella λ in ♎ poſt Lunam paulo infra Grimaldum.
6 15 15 Emerſit ea in recta per Alphonſum & Grimaldum.

Julii 15 veſpere ſub mediam noctem ☾ ad ♃ Luna ad Jovem. Quantum cœlo ſatis nubilo obſervare licuit ad occidentem Jovis erant Satellites 3^{tius} & 4^{tus}, hic auſtralior & accedens, ille borealior & recedens: ad ortum erat Satelles 1^{mus}, qui ante h. 8 veſpertinam exierat ex umbra, adeoque recedens. 2^{dus} latebat poſt Jovem.

4 *
3 *
O * 1

Luna paulo ante mediam noctem appropinquans ♃^{i}
11^h $50'$ $16''$ Limbo ſuo auſtrino texit Satellites 3^{tium} & 4^{tum} ſimul una.
11 56 35 Limbus boreus Jovis cœpit immergi ſub Lunam proxime Bartolum in recta per Tychonem & Menelaum.

M 3

Jun. 16 poſt medium ejuſdem noctis			
0^h	2′	40″	Jupiter quaſi dimidiam partem immerſus erat in recta cum Tychone, & Ariſtotele.
0	11	0	Erat Jupiter modicum ultra medietatem immerſus; cumque centrum Jovis jam emerſiſſet, ſtabat is in recta cum Tychone & Copernico. Mox denſa nubes Jovem abſtulit, malum!
0	19	0	Per hiatum nubis apparuit ♃, jam ferme ſemidiametro ſua diſtans a margine ☾ⁱˢ in recta per Tychonem & Bullialdum. Magnitudo Jovis æquabat proxime Tychonem Lunæ.

Oct. 5 veſpere Luna texit ſtellam ϱ in ♐, ſed per incuriam Immerſio non fuit adnotata.		
7^h	15′ inter & 16′	Emerſit, dum parva nubes modice Lunam tegeret. Locus emerſionis contra cuſpidem boream Langreni.

Dec. 21 mane			
5^h	5′	10″	Emerſit de ſub Luna Lanx auſtralis ♎ in parte obſcura circa medium, paulo propius verſus boreum cornu; & cum parva ſtella prævia, quæ inobſervata emerſerat, ſtabat in linea recta cum centro Lunæ.

Anno 1735.

Jan. 2 veſpere

9^h	$9'$	$30''$	Stella ε in lino ♓ ſe condidit ſub parte obſcura Lunæ in recta per Ptolomæum ſtringente littus auſtrinum maris criſium.
10^h	$15'$	$0''$	Circiter emerſit ſtella modice ad auſtrum Langreni. Nam per incuriam non ſtatim fuit animadverſa, ſed poſt tria minuta temporis.

Mart. 5 mane poſt mediam noctem occultata fuit a Luna ſtella λ in ♊.

0^h	$26'$	$10''$	Facta Immerſio in recta per Copernicum & Proclum.
1	24	30	Facta Emerſio contra mare criſium ferme in eadem recta Immerſionis.

Mart. 28 veſpere

7^h	$15'$	$30''$	Parva ſtellula immerſit poſt Lunam ad ejus partem obſcuram infra cornu boreum, prope quod denuo prodiit poſt unum quadrantem horæ circiter. Non enim ſtatim fuit animadverſa. Stellula hæc non eſt in Atlante Flamſtedii. Videbatur quaſi in recta inter ſtellas λ & ν & in alia recta inter ſtellas x & f ♉.

Anno 1736.

Jan. 24 mane mox a media nocte

0^h	13′	0″	Luna obtexit ſtellam π in ♊ in recta per Gaſſendum & Copernicum. Ad Emerſionem videndam ſero veni diſtante jam ſtella 7′ circiter a margine Lunæ contra Petavium. Latuit prope una hora.

April. 20 veſpere

10^h	5′	20″	Immerſit ſtella π ♌ ſub Lunam in recta per Copernicum & Fracaſtorium.
11	6	10	Emerſit in recta per Sulpitium & Copernicum proxime Beroſum.

Sept. 26 mane

2^h	14′	18″	Immerſit Aldebaran recta contra Roccam.
3	28	27	Emerſit in recta per Ariſtarchum & Albategnium contra Furnerium.

Sept. 29 mane ſtatim poſt mediam noctem Luna occultavit ſtellam λ in ♊.

0^h	52′	45″	Immerſionem proxime Roccam vidit P. Gaubil domi ſuæ.
1	43	34	Emerſionem vidi ego in recta per Ariſtarchum & Copernicum.

Dec. 6

Dec. 6 veſpere

7^h	$10'$	$44''$	Luna texit ſtellam τ præcedentem in ♉ immerſam a medio diſci obſcuri verſus auſtrum. Emerſio non potuit videri.

Dec. 16 veſpere

6^h	$15'$	$15''$	Luna occultavit ſtellulam ex Hyadibus, quæ eſt borealior & in recta linea cum 2 lucidis θ. Immerſio fuit quaſi contra medium Grimaldum. Emerſio modice ad auſtrum Langreni non fuit ſtatim viſa, ſed cum ſtella jam duobus minutis ferme a limbo diſtaret. Acciderit tamen proxime 7^h $22'$. Alias conſequentes ſtellulas ibidem omnes Luna ad auſtrum relinquit; & quæ inter dictas lucidas geminas atque occultatam interjacet parvula, tam prope acceſſit ad Lunam, ut circa h. 7^{am} vix ſeſqui-minuto ab auſtrino margine diſtaret. Exinde autem
10	41	0	Lunæ margo occidentalis in meridiano, & poſt $2'$
10	43	0	Culminat Aldebaran. Tum Luna ad hanc accedente
11	22	0	Diſtantia illius a margine auſtrino erat omnino æqualis diſtantiæ centri Tychonis a margine Lunæ ſcilicet $4'$ $6''$ in micrometro.

Anno 1737.

Febr. 3 veſpere Luna ad ♀ quam etiam occultavit,

2^h	$24'$	$18''$	A meridie Lunæ limbus occidentalis in meridiano, altitudo ſuperioris limbi 46° 28′.
2	28	53	Culminat ♀, die claro, alta 46° 49′.
5	8	8	♀ tangit limbum ☾^{a} prope hujus verticem.
5	8	32	♀ diſparet tecta a ☾^{a}, cujus diameter in micrometro 30′ 25″ proxime. ♀ ingrediens erat alta 33° 46′ circiter; nam perpendiculum tremebat a vento.
6	25	27	♀ cœpit prodire de ſub ☾^{a} recta contra marginem boreum maris criſium alta tum 20°, 46′.
6	26	15	Tota prodiit.

Febr. 9 veſpere Luna texit Aldebaran ♉. Et Immerſio quidem accidit Sole ſupra horizontem exiſtente

4^h	$14'$	$5''$	Clare viſa tubo 6 pedum.
5	32	6	Stella rurſum emerſit recta contra medium maris criſium.

Febr. 16 veſpere

10^h	$12'$	$40''$	Stella τ ♌ ſubiit Lunam recta contra Crugerum.
11	29	15	Emerſit ſtella contra apicem auſtrinum Wendelini.

April. 10 veſpere

7^h	37′	30″	☾ᵃ texit ſtellam ξ ♌ in recta cum Landſpergio & Reinoldo.
8	50	0	Proxime emerſit contra Petavium, ſed non niſi 3′ poſt animadverſa.

April. 12 veſpere

8^h	53′	0″	Diſparuit ſtella τ ♌ obtecta ab ☾ᵃ, vel a vicino ejus lumine abſorpta (cœlo non ſatis claro, & aere groſſiore) prope Roccam, aut Crugerum.
10	10	0	Circiter emerſit paulo ad boream Langreni, ſed nonniſi 3′ poſt circiter animadverſa.

Sept. 13 mane ſemi-minuto circiter ante h. 4ᵗᵃᵐ ☾ᵃ texit ſtellam ξ occidentaliorem in capite Ceti. Diſparuit ea contra Pythagoram in recta per Platonem & Eudoxum. Tum

4^h	44′	48″	Emerſit in recta inter Atlantem, & Hermetem ad Menelaum.

Sept. 16 mane poſt mediam noctem

2^h	48′	30″	Luna texit ſtellam Aldebaran, quæ immergens per aliquot ſecunda videbatur adhærere limbo ☾ᵃ, in recta per Harpalum, & Timocharim.
3	40	20	Emerſit in momento in recta per Ariſtillum & Keplerum.

Oct. 13 mane poſt mediam noctem ☾^{a} ſenſim valde oblique appropinquans ſtellæ γ in ♉ tandem

1^{h}	$56'$	$0''$	Ipſam abſorpſit prope Zucchium, ſed valde modice, nam poſt ſemi-quadrantem jam vidi illam prope extremitatem auſtralem ☾^{a} uno minuto diſtantem a margine.

Nov. 2 veſpere ☾ ad ♃ obſervata ut ſequitur.

5^{h}	$19'$	$3''$	♃ cœpit radere limbum ortivum ☾^{a}.
5	21	1	♃ totus merſus in recta cum Bullialdo & Firmico.
5	29	46	Immerſit Satelles 3^{tius} ſub ☾^{am}, qui erat orientalior ♃^{ve}, alii tres occidentaliores, ob lucem crepuſculi non poterant bene diſcerni.
5	32	20	Dum ♃ ſub ☾^{a} latet, ſtella φ in ♒, erat borealior centro Platonis in declinatione $4'$, $5''$, & occidentalior in aſcenſione recta $35''$ penduli.
5	40	0	Erat eadem φ in eadem declinatione cum limbo boreo ☾^{a}, & in eadem aſcenſione recta cum limbo ejus occidentali.
6	29	0	Viſus emergere Satelles 1us ♃^{is} ex ☾^{a} teleſcopio 14 pedum.
6	29	44	Cœpit prodire margo præcedens ♃^{is}.
6	31	47	♃ plene emerſit modice ad boream Petavii.
6	44	0	Viſus emerſiſſe 3^{tius} Satelles ♃^{is} ex ☾^{a} teleſcopio 8 pedum.
8	30	40	Culminavit ♃ altus 42° $21'$.
8	33	32	Margo ☾^{a} occiduus in meridiano altitudo inferioris limbi 42° $40'$.

11^h 39′ 40″ Cœpit emergere Satelles 1^{mus} ex umbra $♃^{is}$ viſus teleſcopio 8 ped. Denique ſtella φ culminaverat ante ♃ 1′ 27″ penduli, diſtans ab eodem in declinatione 27′ 40″.

Dec. 3 veſpere ante mediam noctem

11^h 34′ 0″ Immerſit poſt $☾^{am}$ ſtella ξ occidentalior in Ceto prope Anaxagoram.

11 49 0 Emerſit in recta per Democritum & Eudoxum.

Dec. 6 veſpere

9^h 24′ 35″ Immerſit Aldebaran ♉ ſub $☾^{am}$ contra apicem auſtrinum Grimaldi.

10 46′ inter & 47′ Emerſit paulo ad boream Petavii.

Anno 1738.

Febr. 26 veſpere

6^h 6′ 47″ Stellæ duplicatæ θ in ♉ borealior a limbo obſcuro $☾^{æ}$ abſorpta eſt.

6 28 35 Immerſit ſtellula alia borealior, a θ auſtraliore ferme diametro $☾^{æ}$ diſtans

6 43 0 Auſtralior θ ſtetit in linea illuminationis $☾^{æ}$ a margine ad auſtrum diſtans 1′ 15″ circiter.

7 14 26 Emerſit borealior θ prope Furnerium. Aliquanto poſt etiam emerſit borealior ſtellula, ſed non fuit niſi multo poſt animadverſa. Immer-

ſionem Aldebaran præciſe non vidi; certum tamen eſt uno vel altero minuto poſt hor. 11 diſparuiſſe, nam hor. 11. 0' adhuc apparebat, & hor. 11. 3' jam non videbatur. Hora 12 mediæ noctis nondum emerſerat; poſtea autem non amplius poterat videri ☾^{a}, tum ob tectorum culmina, tum ob ſpiſſum aerem horizontis.

Maji 1 veſpere

10^h $35'$ $0''$ ☾^{a} texit ſtellam γ in ♍ immerſam paulo ad boream Sinus Iridum. Emerſio non fuit viſa.

Nov. 26 veſpere

7^h $10'$ $55''$ Aldebaran immerſit ſub ☾^{am} ad confinia Schikardi & Phocyllidis.

7 37 50 Emerſit prope Claramontium in recta per Tychonem & Chriſtmannum.

Anno 1739.

Aug. 18 veſpere

9^h $53'$ $5''$ Immerſit ſub ☾^{a} ſtella ſequens δ in cauda ♑ ad Roccam.

11 6 0 Emerſit contra apicem auſtrinum Langreni.

Sept. 16 veſpere

9h	20′	19″	Subiit ☾am ſtella borealis ψ in ♒ prope Cleoſtratum.
9	56	40	Exiit eadem contra marginem ortivum Zoroaſtri.
10	2	25	Subiit ☾am media ſtella ψ proxime Roccam.
11	16	34	Prodiit eadem ad Nodum occidentalem librationis ☾æ.
			Stella auſtralior tranſiit infra ☾am, diſtans a margine auſtrino ferme ſemidiametro.

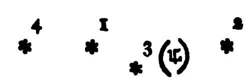
Nov. 8 veſpere

6h	8′	48″	Immerſit ſub ☾a ſtella γ in cauda ♑ in recta per Ariſtotelem & Herculem.
7	3	0	Proxime prodiit de ſub ☾a eadem e regione Mercurii ſeſqui-minuto tardius ſcilicet 4′ 30″ animadverſa.
10	3	57	☾a texit ſtellam δ ♑, cujus emerſio videri non potuit.

Anno 1740.

Oct. 12 mane mox a media nocte inſignis occultatio ♃is cum ſuis Satellitibus ſub ☾a. Ad occaſum ♃is ſtabant Satelles 4tus remotiſſimus, deinde 1mus, ac propior 3tius, ad ortum erat 2dus recedens a ♃ve.

0h	48′	53″	Immerſio Satellitis 4ti
1	3	0	— — — 1mi
1	3	36	— — — 3tii
1	5	47	♃ incipit mergi altus 31° 20′



1^h	$7'$	$3''$	Merſus totus.
1	8	42	Immerſio Satellitis 2^{di}
			Immerſiones erant contra Cardanum proxime.
1	57	38	Emerſio Satellitis 4^{ti}
2	14	10	— — — 1^{mi}.
			Satelles 4^{tius} interea immerſerat, & latebat in umbra $♃^{is}$.
2	17	8	♃ incipit prodire.
2	18	35	Prodiit totus, altus 45°, 40′ proxime
2	22	44	Emerſio Satellitis 2^{di}.
			Emerſiones fiebant paulo infra Firmicum in recta per Agrippam & Copernicum.
4	43	11	Cœpit emergere Satelles 3^{tius} ex umbra $♃^{is}$.
5	42	47	Immerſus eſt Satelles 1^{mus} in umbram $♃^{is}$.

Oct.	31	veſpere	$☾^a$ appulit ad 2 ſtellas auſtraliores quadranguli, quod eſt ſupra caudam Ceti juxta Colurum æquinoctialem.
9^h	$2'$	$44''$	$☾^a$ texit præcedentem in recta cum Copernico & Manilio.
10	16	38	Emerſit contra marginem auſtrinum Wendelini.

Nov.	10	veſpere	$☾^a$ poſt ortum ſuum occuluit $♂^{tem}$, ſed Immerſio non potuit videri ob nubes ſupra horizontem. Emerſio inſtar fulguris
11^h	$2'$	$15''$	Accidit in recta ex Keplero per Menelaum ſtringente Copernicum & Manilium.

Dec. 5

Dec. 5 mane mox a media nocte

0^h $26'$ $0''$ ☾^{a} texit η in ♊ immerſam contra Byrgium.
Emerſio ob nebulam non fuit obſervata.

Anno 1741.

Febr. 22 veſpere ſub mediam noctem

11^h $44'$ $26''$ ☾^{a} texit oculum boreum Tauri immerſum in recta per Manilium & Cenſorinum.
Emerſio videri non potuit ob ☾^{am} vicinam horizonti.

Febr. 25 mane poſt mediam noctem

1^h $38'$ $45''$ Subiit ☾^{am} ſtella μ in ♊ prope cornu auſtrinum in recta per Tychonem & Poſſidonium, nec emerſit ante 1^h $55'$ ubi ☾^{a} aſpectui ſe ſubduxit.

April. 20 veſpere ☾^{a} ad ♃^{em}, ad cujus latus occidentales erant 3 priores Satellites, ad ortum ♃^{ius}.

10^h $50'$ $42''$ Satelles 3^{tius} ſubiit partem obſcuram ☾^{a}, tum ♃ jam erat in atmoſphæra ☾^{a}, & 3 alii Satellites non poterant amplius diſcerni.

10 56 45 ☾^{a} cœpit tegere limbum occidentalem ♃^{is}, &

10 57 35 ♃ totus diſparuit in medio inter utrumque cornu ☾^{a} recta verſus centrum. Poſtea ☾^{a} poſt ædes abiit ablata ſecum ſpe omni videndæ Emerſionis.

Sept. 24 veſpere

8^h	$7'$	$15''$	☾ᵃ texit ſtellam quadranguli ante caudam Ceti auſtralium præcedentem immerſam paulo ad ortum Cleoſtrati.
9	0	13	Emerſit prope Beroſum in recta per Proclum & Cenſorinum.

Dec. 17 veſpere

10^h	$25'$	$0''$	☾ᵃ occultavit ſtellam ν in ♓ in recta per Copernicum, & Sulpitium, quantum apparebat, ferme centraliter. Emerſio non fuit viſa.

Anno 1742.

Jan. 14 veſpere

5^h	$17'$	$13''$	☾ᵃ texit ſtellam ξ in occipite Ceti ſeu occidentaliorem prope Ricciolum. Emerſio non potuit videri ob nebulæ denſitatem; ex ſtellæ tamen ſitu tardius viſo viſa eſt accidiſſe proxime 6^h $30'$ contra Petavium.

Mart. 13 veſpere ☾ᵃ texit ſtellam, quæ inter cornua Tauri auſtrinum & boreum proxime ſequitur ſecundum Eclipticam (vide Zodiac. Stellat. Flamſtedii).

7^h	$13'$	$30''$	Facta Immerſio in recta, per Plinium, & Proclum.

Emerſio fuit circa $8^h\ 30'$; ſed tardius animadverſa ſtante ſtella in recta cum Firmico & Cenſorino.
Libratio ☾^{æ} maxima ad occaſum.

Anno 1743.

Nov. 3 veſpere ☾^{a} texit ſtellam A in ♉, & Immerſio quidem videri non poterat ☾^{a} poſt templi tectum hærente.
$8^h\ 25'\ 0''$ Emerſio autem facta & viſa recta contra medium mare Criſium.

Anno 1744.

April. 24 veſpere
Conjunctio ♃^{is} cum ☾^{a} quaſi centralis. Immerſio tamen videri non potuit ob nubes, ventum & pulveres. Emerſio ſatis bene viſa accidit
$9^h\ 54'\ 0''$ recta in margine contra Langrenum.

Anno 1745.

Mart. 7 veſpere

7^h	$12'$	$30''$	♀ cœpit ſe condere ſub ☾^{a}.
7	13	0	♀ tota latuit.
8	18	0	♀ cœpit rurſus emergere.

CAPUT III.

CONGRESSUS LUNÆ CUM STELLIS CITRA OCCULTATIONEM.

Anno 1718.

Febr. 9 veſpere

5^h	$30'$	$30''$	☾ª tranſiit meridianum. Ejus diameter $33'\ 9''$.
7	54	0	Prima Hyadum diſtabat a propiore limbo ☾ª in auſtrum $20'\ 48''$ exiſtens; tunc in eadem recta cum extremis cornibus ☾ª.
11	30	0	Stella inter primam Hyadum & ſequentem auſtralem duplicem media diſtabat ab auſtrali limbo ☾ª $29'\ 21''$.

Febr. 12 veſpere

6^h	$50'$	$0''$	☾ª tranſiit juxta ſtellam, quæ Hevelio dicitur ad nates Pollucis, ejus minima diſtantia a limbo auſtrali ☾ª erat $3'\ 24''$ Diameter Lunæ $33'\ 49''$.

Mart. 5 veſpere

7^h	$14'$	$0''$	Stabat Luna inter duas parvas ſtellas, quæ ad auſtrum (fuerit haud dubie in lino auſtrino ♓ Hevelio 8ᵛᵃ, Bayero μ) erat in linea recta cum acuminibus cornuum diſtans a proximo margine $18'\ 24''$. Ad boream altera, quæ non eſt notata in catalogis, erat.

7^h	21′	0″	In recta cum cornibus Lunæ diſtans a propiore margine 20′ 8″ Diameter Lunæ erat 30′ 21″.

Mart. 7 veſpere poſt hor. 7 ſtabat Luna inter 3 ſtellulas, ſingulas ad diſtantiam fere unius ſemidiametri Lunæ a limbo. Una erat occaſum verſus, quæ a Luna obtecta fuerit, ſatis certo, indeque paulo ante 6^h 30′ emerſerit; altera ſeptentrionem verſus, & 3^{tia} ad ortum, cui ſucceſſive appropinquans Luna eam obtexit.

8^h	7′	30″	In recta per centrum S. Theophili ſtantis tunc in extremitate illuminationis. Et per S. Iſidorum Mart. Capellam, mare fœcunditatis, ac terram vigoris, adeoque punctum Immerſionis fuerit e regione Phocillidis, & Schilleri. Emerſio ſtellæ ob lucem ☾ non ſatis fuit diſtincta.
8	53	0	Jam fere ſemidigitum diſtans a margine terminabat rectam cum S. Theophilo tranſeuntem, Stevinum inter & Petavium, Diam. Lunæ 30′ 45″.

Mart. 19 mane poſt mediam noctem

1^h	19′	0″	Spica ♍ tranſiit meridianum.
1	50	20	Tranſiit eundem centrum Lunæ.

Julii 9 veſpere

9^h	34′	0″	Tranſiit meridianum Luna.

9^h 39′ 30″ Tranſiit eundem ſtella in femore Ophiuchi Bay. *y* recta autem ab hac ſtella ad cor ♏ tangebat marginem borealem Lunæ nonnihil verſus occidentem.

Aug. 9 veſpere
10^h 38′ 0″ Tranſiit meridianum lucida Antinoi.
10 43 0 — — — duplicata in cornu ♑.
10 43 45 — — — limbus occidentalis Lunæ.
Mora tranſitus Lunæ 2′ 15″ penduli.
Diameter Lunæ 32′ 25″.

Anno 1719.

Febr. 23 veſpere
7^h 0′ 0″ Stella *μ* in lino ♓ ſtabat a Luna ad boream in proxima fere diſtantia 36′ 24″ a limbo propiore, ergo 51′ 6″ a centro, nam Diam. Lunæ erat 29′ 24″.

Febr. 24 veſpere circa occaſum Solis prodierat ex Luna ſtella *ξ* occidentalior duarum in Ceti occipite.
6^h 5′ 0″ Circiter diſtabat a proximo limbo Lunæ 21′ 10″.
6 45 0 Diſtabat uno Diametro Lunæ, quæ erat 30′ 5″. Tranſitus ſtellæ reſpectu centri Lunæ fuit borealis.

Mart. 31 Luna culminavit ante Regulum 58′ 0″.

April. 6 mane poſt mediam noctem

2^h 30′ 0″ Luna tranſiit ad ſtellam χ in ♍ relinquens hanc ad auſtrum in diſtantia a limbo auſtr. 11′ 30″. Diameter Lunæ erat tum 33′ 40″.

Jun. 28 Luna culminavit 39′ 30″ ante cor ♏.

Jul. 20 veſpere ☌ ♀ ☾^{a}. ſed ob nubes vix bene obſervari potuit,

7^h 40′ 0″ ſtabat ♀ quam proxime in eodem verticali cum centro Lunæ a limbo boreo remota 42′ 0″.

Jul. 21 veſpere

8^h 22′ 0″ Stella β in ♍ ſtabat in recta cum extremis cornibus Lunæ a limbo auſtrino diſtans 26′ 0″. Diameter ☾^{æ} 33′ 0″.

Sept. 18 veſpere poſt h. 7 Luna tranſibat inter 2 ſtellulas, circiter

7^h 15′ 0″ ea, quæ ad auſtrum aberat a propiore limbo ☾^{æ} in proxima diſtantia 35′ 30″.

7 45 0 Quæ ad boream in proxima diſtantia aberat a limbo propiore 1° 15′ 0″ proxime. Hæc poſterior videbatur eſſe ϑ in ♎.

Sept. 28 mane poſt mediam noctem ☾ª proxime ſtrinxit ſtellam in quadrato caudæ Ceti præcedentem e borealibus.

0^h 42′ 0″ Videbatur proxima δ, ſtella a limbo auſtrali prope Cabeum vix integrum minutum remota.

Oct. 10 mane tranſiit Luna inter Regulum ♌ & A ejusdem poſt-

4^h 26′ 0″ quam ☾ª ſupra Eccleſiam videri potuit; diſtabat Regulus a proximo limbo verſus occaſum boreum 1° 5′ 54″, & ſtella A ad auſtrum 56′ 48″;

4 45 0 diſtabat Regulus a limbo proximo ☾ª 1° 11′ 32″, & ſtella A 1° 0′ 12″. Diameter ☾ª 33′ 45″.

Oct. 20 veſpere culminavit ☾ª cum β ſeu inferiore in cornu ♑, &

6^h 40′ 0″ diſtabat nebuloſa σ in capite ♑ a propiore limbo ☾ª verſus auſtro occaſum 1° 3′ 30″.

Diam. Lunæ 32′ 12″.

Oct. 22 veſpere ſtella ι in ♒ ab auſtrino limbo ☾ª.

7^h	30′	0″	diſtabat	1°	21′	40″
8	0	0	— —	1	24	30
8	15	0	— —	1	26	15
8	30	0	— —	1	28	5.

Oct. 23 veſpere ☾ª culminavit præciſe cum Scheat ♒; tum ſtella λ in ♒ a limbo boreo Lunæ

6^h

$6^h\ 40'\ 0''$	diſtabat	$1^\circ\ 32'\ 0''$	$8^h\ 25'\ 0''$	diſtab.	$1^\circ\ 20'\ 10''$
7 0 0	—	1 29 40	8 35 0	—	1 19 30
7 15 0	—	1 28 0	8 52 0	—	1 18 45
7 25 0	—	1 26 30	9 0 0	—	1 18 10
7 35 0	—	1 24 50	9 10 0	—	1 18 0
7 45 0	—	1 23 30	9 30 0	—	1 18 30
7 55 0	—	1 22 40	9 50 0	—	1 19 0
8 0 0	—	1 22 0	10 0 0	—	1 19 12
8 5 0	—	1 21 35	10 15 0	—	1 20 0
8 10 0	—	1 21 10	10 30 0	—	1 20 50
8 15 0	—	1 20 50	10 50 0	—	1 24 0

Oct. 31 mane poſt mediam noctem ☾ae culminat præciſe 10′ ante Aldebaran, & poſt 4′ 30″, hoc eſt,* ſubiit poſt ☾am

* $2^h\ 8'\ 0''$ e regione Roccæ in recta per Ariſtarchum & Galilæum parva ſtella, quæ eſt ad boream duplicatæ in Hyadibus etiam libero oculo viſibilis. Supra duplicatam autem tranſivit ☾a ita, ut minima diſtantia ſtellæ auſtralis ab auſtrali limbo ☾ae eſſet 19′ 50″, borealis ſtellæ vero ab eodem limbo 14′ 10″, eratque tum circiter $2^h\ 36'\ 0''$. Emerſio ſtellæ prioris prope Nod. occid. fuit $3^h\ 30'\ 0''$, vel ad ſummum uno vel ſeſqui-minuto poſt.

Nov. 9 mane

$6^h\ 37'\ 0''$ Subingreſſa eſt ☾am proxime infra Eichſtadium ſtella γ in ♍.

Nov. 23 veſpere Luna texit ſtellam μ in lino auſtrino ♓ circi-
7^h 0′ 0″ ter, uno minuto ante vel poſt facta Immerſio in recta ex Calippo per Platonem prope Anaximandrum.

7^h 28′ 0″ Facta eſt Emerſio ad Zoroaſtri acumen auſtro orient.

Anno 1720.

Febr. 14 veſpere ☾* cum ſtella in Ceto Bay ξ ſeq., Hevelio in fronte occid.. Tranſivit Luna ad boream ſtellæ,
8^h 15′ 0″ quæ quam proxime ſtabat in eadem recta, cum extremis cornibus ☾* ab auſtrali limbo remota 15′, 40″.

Febr. 26 mane poſt ortum Solis erat ☉ ♃ ☾ tranſeunte ☾* ad boream ♃^{is}, qui a limbo auſtrali ☾*

5^h	40′	0″	diſtabat		1°	13′	30″
5	55	0	—	—	1	10	0
6	10	0	—	—	1	6	45
6	25	0	—	—	1	4	0
6	40	0	—	—	1	1	30

Poſtea videri ♃^{ter} jam non poterat.

Febr. 28 poſt mediam noctem obſervavi ☌ ☾* cum ſtella κ in ♍ ſic: ſtella ab auſtrali limbo Lunæ

2^h	20′	0″	diſtabat		1°	7′	15″
2	35	0	—	—	1	16	20
2	50	0	—	—	1	6	0
3	15	0	—	—	1	6	30
3	20	0	—	—	1	7	50

Mart. 12 veſpere ☾ᵉ erat infra ſtellam ξ occid. ſeu occiput Ceti, quæ a margine boreo ☾ᵉ

6^h	50′	0″	diſtabat		1°	9′	45″
7	0	0	—	—	1	5	30
7	15	0	—	—	1	0	15

Deinde nubes occuluit ☾ᵉᵐ.

Mart. 15 veſpere ☌ Ecliptica ſtellæ Aldebaran cum ☾ᵉ accidit

9^h	3′	30″	Immerſio in recta cum S. Theophilo & Firmico, adeoque e regione Schilleri.
9	40	30	Emerſio in recta ex S. Cyrillo per Piccolomineum.

Mart. 24 veſpere

7^h 6′ 0″ Stella γ in ♍ diſtabat a margine auſtrali ☾ᵉ 25′ 40″; tum poſt nubes

8	20	0	diſtabat		28′	45″	9	15	0	diſtabat		43′	30″
8	45	0	ab eod.		34	20	9	30	0	—		49	50
9	0	0	—	—	38	40	9	45	0	—		54	20

Maj. 18 veſpere
8^h $0'$ $0''$ Luna jam prætergreſſa ſtellam γ in ♍ a limbo auſtro-occiduo habebat diſtantem $1°$ $21'$.

Oct. 8 veſpere Luna ferme dichotoma ſtabat inter ſtellas ο & π in capite ♐, illam præteriverat nonnihil borealior, huic appropinquabat, ac tandem eam occultavit, cum in horologio turris Eccleſiæ præciſe ſonaret 8^h, recta in loco Immerſionis ad Atlantem ducta ſtringebat marginem boreum Eudoxi; delituit ſtella ſub ☾^{a} $58'$ $30''$, & locum Emerſionis notat recta ex Ariſtotele ſtringens marginem auſtralem Atlantis.

Oct. 19 veſpere ☾^{a} ad Hyadas nempe

9^h	$25'$	$0''$	diſtabt γ ab auſtrali limbo ☾^{a}	$1°$	$5'$	$15''$
9	45	0	— — — —	1	10	20
10	10	0	— — δ a limbo boreo	0	47	20
10	40	0	diſtabat duplic. auſtr. a limb. auſt. ☾^{a}	0	36	40
			Et borealis. — —	0	42	40
11	5	0	— — auſtralis. — —	0	35	24
			borealis. — —	0	41	0
11	15	0	— — • δ lucida — —	1	1	25
11	20	0	— — ϑ auſtralis. — —	0	35	0

Oct. 20 mane Aldebaran ab auſtrino margine Lunæ

4^h	20′	0″	diſtabat	38′	0″		5^h	15′	0″	diſtabat	35	50
4	30	0	—	37	26		5	30	0	—	36	15
4	40	0	—	36	40		5	45	0	—	37	10
4	55	0	—	36	0		6	0	0	—	38	25

Nov. 17 veſpere præcedens in clava Orionis a marg. auſt. ☾*

10^h	0′	0″	diſtabat	47′	0″		11^h	0′	0″	—	23	30
10	15	0	—	40	30		11	15	0	—	18	0
10	30	0	—	34	40		11	30	0	—	13	25
10	45	0	—	28	30		11	45	0	—	8	45

Decem. 15 veſpere

10^h 0′ 0″ ☾* tranſiens ad boream ſtellæ γ in ♊ reliquit eam ab auſtrali margine diſtantem 4′ 30″. Quántum ferme Tycho aberat ab eodem margine.

Anno 1721.

Jan. 23 mane ☾* tranſibat ſtellam ϑ in ♎.

4^h 50′ 0″ Proxima hujus diſtantia ab ejus limbo auſtrino erat 21′ 30″, & tum Diam. ☾* 32′ 30″.

Mart. 7 veſpere ☾* tranſiit ad boream ſtellæ γ in ♎, & hæc a centro ☾* ad auſtrum.

	38′ 45″
—	39 40
—	33 20
—	41 0

& hæc a

	1°	7′	0″
—	1	6	45
—	1	7	30

diſtabat a pro-
preſſa 0′ 35′ 0″;
[illegible]xima diſtantia a
[illegible]

[illegible]do ☾		1°	1′	0″
—	—	0	52	30
—	—	0	42	0
—	—	0	32	0

[illegible] ex Tychone per
[illegible]ontani
[illegible] per Ptolomæi mar-

Sept. 10 mane poſt mediam noctem
1ʰ 10′ 0″ ☾ᵃ tranſiens ſtellam ξ oriental. in Ceto reliquit eam in diſtantia minima a margine auſtrino 3′ 30″.

Oct. 31 Veſpere ☾ᵃ tranſibat ad ſtellas inferiores, in quadrato caudæ Ceti Hevelio præcedentem obtexerit, ſequentem reliquit ad auſtrum.
9ʰ 10 0 Hæc diſtabat a margine auſtrino in auſtrum 6′ 20″; altera a margine occiduo 28′ 10″.
9 15 0 Diſtabat propior 5′ 30″.
9 30 0 Culminante Luna diſtabat propior ſequens 4′ 15″, præcedens remotior 35′ 20″.

Nov. 6 mane ☾ᵃ inter ſtellas δ & ε in capite ♉

6ʰ	5′	0″	Diſtabat δ a margine occiduo ☾ᵃ	41′	0″
			Et ε a margine ort. boreo	53	20
6	20	0	— — δ a marg. occid. —	47	20
			ε a marg. ort. bor. —	50	0
6	35	0	— — δ a marg. occid. —	52	30
			ε a marg. ort. bor. —	47	20

Anno 1722.

Jan. 24 veſpere 6ʰ ante culminantem Procyona ſtella μ in Ceto erat in linea recta cum cornibus ☾ᵃ diſtans ab auſtrali 18′ 20″.

Jan. 25 veſpere
7^h 55′ 0″ Stella f in ♉ diſtabat a cornu auſtrali ☾ 1° 9′ 20″ jam peracta proxima ☌.

Jan. 26 veſpere
10^h 45′ 0″ Triplicis ſtellæ δ in cap. ♉ præcedens ſtabat in recta tranſeunte per mediam ☾, & per maculas Maginum, Walterum, Autolicum, Ariſtillum, & diſtans a margine auſtrino ☾, in auſtrum 9′ 50″.
11 22 0 Venit ad eandem lineam ſtella δ auſtralior diſtans a margine auſtrino in auſtrum 18′ 20″. Stella δ ſequens
12 0 0 Et borealior fuit occultata a ☾, ut ſuo loco notatum.

Jan. 28 veſpere
10^h 15′ 0″ ☾ tranſiens infra Propodem ♊ reliquit hunc a limbo boreo diſtantem. 1° 4′ 50″.

Febr. 20 veſpere
9^h 15′ 0″ Stella ξ ſequens in capite Ceti diſtabat a propiore margine obſcuro ☾ ad auſtrum 54′ 10″.
9 45 0 Diſtabat eadem ab eodem 46′ 0″.

Mart. 9 mane ☾ ad ſtellam ϑ in ♎, quæ a margine boreo

4^h

4^h	$0'$	$0''$	diſtabat	$44'$ $20''$
4	45	0	— —	35 50
5	15	0	— —	32 30

April. 6 mane ☾^{a} ad ♃^{vem}, qui a margine auſtrino ☾^{a}

4^h	$0'$	$0''$ diſtabat	$35'$ $10''$		4^h	$42'$	$0''$ diſtabat	$26'$ $40''$
4	6	0 —	33 15		4	52	0 —	25 30
4	18	0 —	31 0		5	0	0 —	24 45
4	25	0 —	29 40		5	6	0 —	24 20
4	34	0 —	28 10		5	10	0 —	24 15
4	36	0 —	27 30					

Atque hæc ultima diſtantia viſa eſt minima, nam exinde iterum notatæ ſunt creſcere.

April. 7 mane poſt mediam noctem ☾^{a} tranſivit prope ♄, quem reliquit ad boream in proxima diſtantia a margine boreo $25'$ $35''$, atque hæc dimenſio facta

0^h $48'$ $0''$ exinde notata eſt creſcere diſtantia, nam

0 58 0 erat $26'$ $25''$, tum

1 4 0 ſtans ♄ in recta linea cum utroque cornu ☾^{a} diſtabat a margine boreo $26'$ $50''$, &

1 12 0 diſtabat $27'$ $45''$.

Jun. 15 veſpere tranſiit ☾^{a} ad ♀^{em} auſtralior.

7^h $52'$ $0''$ Diſtabat ♀ a margine illumin. & propiore $49'$ $0''$

8 0 0 Diſtabat ab eodem $53'$ $0''$.

Jun. 26 vefpere			ſtella β in ♏ a margine occiduo ☾ª
8^h	0′	0″	diſtabat 1° 1′ 0″, & ſtella ν in ♏ a margine auſtr. ☾ª
9	15	0	diſtabat 0° 8′ 30″.
9	30	0	— — 0 6 0
9	45	0	— — 0 3 30

Jul. 2 mane poſt			mediam noctem ☾ª tranſiens ſtellam ε ♑ reliquit
1^h	15′	0″	eam diſtantem a limbo auſtrali 10′ vel 12′ circiter, tum mane ſub auroram tranſiens ſtellam κ in ♑ reliquit a limbo auſtrino proxime diſtantem 3′ 0″.

Sept. 16 veſpere			☾ª tranſiens ſupra ſtellam β in ♏ reliquit eam di-
7^h	45′	0″	ſtantem a limbo auſtrali prox. 15′ 45″, una hora poſt paulo ante occaſum ☾ª diſtabat ♃ter a limbo propiore ☾ª præciſe 1° 0′ 0″.

Sept. 17 veſpere			Luna tranſiens infra ♄num eundem reliquit diſtan-
7^h	15′	0″	tem a margine boreo 31′ 30″.

Nov. 12 veſpere			tranſivit ☾ª ad boream ſtellæ λ in ♐, quam reli-
6^h	45′	0″	quit ab auſtrino limbo diſtantem 13′ 50″, quaſi in proxima diſtantia.

Dec. 7 mane tranſivit ☾ᵃ ad auſtrum ☿ⁱⁱ ita, ut diſtaret ☿ⁱᵘˢ a pro-

6^h	45′	0″	piore limbo ☾ᵃ in boream		44′	10″.	
6	56	0	—	ab eodem	—	41	50
7	6	0	—	ab eodem	—	40	45

Dec. 17 veſpere ſtella ν in ♓ a limbo lucido propiore ☾ᵃ

6^h 2′ 0″	diſtabat	22′ 0″	in recta ex Tychone			per Menelaum.
6 17 0	— —	23 0	—	—	—	— per Plinium.
6 32 0	— —	24 45	—	—	—	per S. Dionyſium.
7 5 0	— —	32 25	—	—	—	per Cenſorinum.

Diameter ☾ᵃ 31′ 10″.

Dec. 20 veſpere tranſivit ☾ᵃ ad ε oculum boreum ♉, borealior eodem ſtella ε ab auſtr. propiore limbo ☾ᵃ

10^h 0′ 0″	diſtabat	23′ 30″	in recta ex Regiomontano		per margin. auſtr. Mar. Criſium.
10 15 0	— —	20 15	in recta e Tychone		} per marg. auſtr.
10 30 0	— —	19 0	—	ex eodem	} Mar. Criſium.
10 45 0	— —	18 10	—	ex Menelao	per Tych.
11 0 0	— —	17 55	—	ex Arato	Diam. ☾ᵃ
11 15 0	— —	18 5	—	ex Eratoſthene	30′ 55″.

Anno 1723.

Febr. 19 veſpere ſtella ν in ♌ a margine auſtrino ☾ᵃ

8^h 0′ 0″	diſtabat	23′ 30″	8^h 30′ 0″	diſtabat	20′ 5″
8 20 0	— —	20 30	8 40 0	— —	20 0

8^h	50′	0″	diſtabat	20′	5″		9^h	10′	0″	diſtabat	21′	20″
9	0	0	— —	20	30		9	20	0	— —	23	0

Mart. 2 mane ☾ accedens ad occultandam ſtellam λ in ♐ habebat in diametro 31′ 10″, & ſtella λ a limbo ☾ orientali verſus Roccam

5^h	45′	0″	diſtabat	32′	25″		6^h	10′	0″	diſtabat	22′	35″
5	58	0	— —	27	15		6	20	0	— —	19	40

Mart. 13 veſpere ſtella *o* in cornu auſtrino ♉ a limbo auſtrali ☾, cujus diameter 31′ 10″

7^h	35′	0″	diſtabat	46′	55″		8^h	30′	0″	diſtabat	49′	5″
8	10	0	— —	48	15		8	50	0	— —	52	0

Jun. 16 veſpere tranſitus ☾ inter ſtellas β & ω in ♏. Stella β a boreali limbo ☾ infra illam tranſeuntis

9^h	15′	0″	diſtabat 8′ 30″ a Pythagora in margine.
9	30	0	— — 8 0
9	45	0	— — 8 30
10	41	0	Erat ſtella β in recta ex Tychone per Bettinum.
10	46	0	— — — — — per Kircherum.

Tum ſtella ω borealior occultata fuit a ☾, quod vide Cap. II.

Anno 1724.

Aug. 2 veſpere

10^h	0′	0″	Stella τ in ♐ tranſiens per meridianum cum ☾ᵃ ab hujus auſtrali margine diſtabat 7′ 40″ in recta per Tychonem ad Ariſtarchum jam transacta ☌.

Nov. 3 mane ſtella υ præcedens in ♉ a limbo ☾ᵉ auſtrali

4^h	38′	0″	diſtabat 5′ 10″
4	45	0	— — 3 0
4	52	0	— — 2 10
5	10	0	Stella υ ſequens ſubiit poſt Lunam e regione Phocyllidis.
6	0	0	Præciſe prodiit rurſus e regione Furnerii.

Nov. 30 veſpere

8^h	15′	0″	Stella τ in ♉ ab auſtrali limbo ☾ᵉ tranſeuntis diſtabat 23′ 30″.

Dec. 12 mane ☾ᵃ tranſivit infra ſtellam α in ♎, cujus a propiore limbo ☾ᵉ diſtantia

6^h	35′	0″	erat 1° 6′ 30″
6	45	0	— 1 3 45
6	55	0	— 1 1 0

Auſtralior poſt Emerſionem a limbo occiduo ☾^{a}

8^h	44′	0″	diſt.	9′	10″	9^h	12′	0″	diſt.	18′	49″
8	55	0	—	12	50	9	48	0	—	32	0.

Media raſit limbum boreum ☾^{a}; nempe

7	35	0	diſt.	3′	14″	8^h	8′	0″	diſt.	2′	25″
7	45	0	—	2	25	8	12	0	—	2	57
7	52	0	—	1	53	8	35	0	—	7	32
8	0	0	—	1	53	9	10	0	—	17	12.

Dec. 23 mane tranſitus ☾^{a} ad ♂^{tem}, qui a marg. auſtr.

4^h	30′	0″	diſt.	33′	15″	5^h	20′	0″	diſt.	40′	30″
4	50	0	—	32	0	5	30	0	—	42	15
5	0	0	—	31	35	5	40	0	—	44	0
5	10	0	—	38	50	5	50	0	—	45	40.

Diameter ☾^{a} 32′ 30″.

Anno 1726.

Jan. 7 veſpere ☾^{a} tranſivit ad boream ſtellæ *f* in ♒, quæ ab auſtrali limbo ☾^{a}, cujus Diam. 29′ 50″

7^h	6′	0″	diſt.	10′	45″
7	18	0	—	9	40
7	30	0	—	8	36; cum ſtella jam propinqua eſſet rectæ, per cornua ☾^{a} ſe abſcondit poſt tectum.

Jan. 8 veſpere tranſiit ☾^{a} ad ſtellas ψ in ♒, quin ullam obtegeret, borealior a propiore margine ☾^{a} 6^h

6h	0′	0″	diſt.	30′	6″		7h	6′	0″	diſt.	9′	8″
6	34	0	—	18	16		7	50	0	—	3	50
6	45	0	—	15	0		ſtabatque in recta linea cum utro-					

que cornu ☾ᵉ. Porro trium ſtellarum ψ præcedentes 2 diſtant ab invicem 30′ 15″; ſequentes vero 2 diſtant 28′ 25″. Diam. ☾ᵉ 30′ 6″.

Jan. 13 veſpere tranſiit ☾ᵉ per ſtellas in cauda ♈, & ſtella δ poſt Emerſionem a limbo ☾ᵉ prope mare criſium

5h	12′	0″	diſt.	28′	36″		Stella ξ procul ad bor. tranſiit,
5	25	0	—	33	15		ex ſtellis autem τ ſequentes 2
5	42	0	—	40	6		auſtraliores obtectæ ſunt, ut vi-

dere eſt Cap. 2. Diameter ☾ᵉ 32′ 25″.

Jan. 17 veſpere ſtella υ in ♊ a limbo ☾ᵉ prope mare criſium

5h	51′	0″	diſt.	34′	10″
6	8	0	—	41	25
9	0	0.			

Diameter ☾ᵉ 33′ 40″ ſtantis inter ſtellas β χ & φ ♊ pari ferme a ſingulis intervallo.

Jan. 19 mane ☌ ♂ ☾ᵉ arctiſſima tamen citra occultationem ♂ⁱˢ a margine ☾ᵉ Euro-boreo diſtantia

4h	1′	40″	erat	30′	20″
4	11	40	—	26	0
4	23	45	—	20	5
4	31	45	—	15	20

4^h	41′	45″	—	10′	55″	in recta cum Ariſtarcho & Langr.
4	51	45	—	6	35	— — Ariſt. & Albategnio.
5	1	45	—	2	45	— — Copern. & Maurol.
5	11	48	—	0	40	— — Copern. & Tychone.
5	33	50	—	1	30	— — Manilio & Tychone.
5	41	50	—	3	40	— — Menelao & Tychon.
5	51	52	—	7	30	— — Poſſidonio & Menel.
6	1	52	—	11	45	— — Poſſid. ſin. æſt. med. Merſenn.
6	11	52	—	17	30	— — Proclo Cenſor. Tych.
6	22	55	—	23	30	— — Tarunt. Beda Tych.
6	31	55	—	29	0	a margine occid. ☾^a.

Feb. 19 mane poſt h. 5 tranſiit ☾^a infra ſtellam ν in ♍, quæ a margine boreo

5^h	12′	0″	diſt.	13′	55″	in recta ex Tych. per marg. occid. Copernici.
5	26	0	—	13	40	— per Timocharim.
5	40	0	—	13	55	— per Platonem.
5	45	0	—	14	20	— per Ariſtillum.
5	55	0	—	15	36	— per Manilium.

Febr. 24 mane poſt mediam noctem cor Scorpii ſive α ♏ accedebat ad limbum lucidum ☾^a, ſemper obtinens rectam ex Copernico per Grimaldum, modice ſenſim ab hujus margine boreo deviantem ad cuſpidem auſtralem. Diſtantia ſtellæ α ♏ a limbo propiore lucido ☾^a.

4^h	11′	30″	erat	30′	30″	5^h	15′	0″	erat	11′	50″
4	26	20	—	24	20	5	20	30	—	10	12
4	48	0	—	20	58	5	28	30	—	7	47
4	56	0	—	18	17	5	34	0	—	5	55
5	2	0	—	16	8	5	39	30	—	4	2
5	8	30	—	14	0	5	46	0	—	α ♏ immerſit; vid. C. 2.	

Mart. 11 veſpere ſtella borealior cæteris in trapezio, quod eſt ſub pedibus aurigæ occultanda a ☾ª eidem appropinquabat, obtinens ſemper perpendicularem ad lineam per utrumque cornu paulo plus quam dichotomæ tranſeuntem, ab hac porro linea

9^h	19′	0″	diſtabat *ª	44′	50″	10^h	15′	0″	diſtab. *ª	18′	50″
9	45	0	—	33	5	10	25	0	—	13	15
10	0	0	—	25	50	10	36	25	Immerſio, quam vide cap. 2.		

Jun. 9 veſpere ☾ª tranſibat ad boream ſpicæ ♍, quæ a cuſpide auſtrali ☾ª

9^h	50′	0″	diſtabat	48′	40″	10^h	36′	0″	diſtabat	40′	45″
10	18	0	—	44	25	10	54	0	—	40	10

Sept. 2 veſpere ☾ª ad boream ſtellæ π in ♏, quæ a cuſpide auſtrali extremæ illuminationis ☾ª

7ʰ 15′ 0″	diſtabat	43′ 30″	8ʰ 0′ 0″	diſtabat	31′ 35″
7 30 0	—	39 20	8 15 0	—	27 55.
7 45 0	—	35 25	Diam. ☾ᵉ 31′ 10″.		

Sept. 30 veſpere ☾ᵃ tranſiit infra ſtellam α ♏, quæ peracta jam ☌ a margine ☾ᵉ prope mare criſium

7ʰ 10′ 0″	diſtabat	29′ 0″	
7 20 0	—	30 40	quanta ferme diameter ☾ᵉ.
7 30 0	—	32 0	
7 40 0	—	33 40.	

Oct. 2 veſpere ☾ᵃ ad boream ſtellæ δ ♐ valde prope, ſed propter nubes non poterant capi aliæ, niſi ſequentes peracta jam ☌, diſtantia a margine auſtr. ☾ᵉ.

7ʰ 36′ 0″	Diſtantia erat	19′ 12″	
7 42 0	— —	21 6	
8 0 0	— —	26 40	
8 30 0	— —	52 40.	Diameter ☾ᵉ 31′ 0″.

Oct. 23 mane tranſiit ☾ᵃ ad auſtrum ſtellæ η in ♍, quæ 5ʰ 30′ 0″ diſtabat a cornu boreo ☾ᵉ 29′ 0″, ſocia ſtella minor valde propinqua erat ☾ᵉ; ſed non licuit plura obſervare, quia exeundem erat ad negotia.

Nov. 7 veſpere ☾ᵃ ad ♃ᵛᵉᵐ, qui a margine propiore auſtr. ☾ᵉ

6^h	15′	0″	diſtabat	1^h	18′	0″	
7	15	0	—	1	13	0	
7	45	0	—	1	13	30	Diameter ☾ 30′ 55″.

Dec. 18 mane ☾ ad boream ſpicæ ♍, quæ a limbo auſtrali ☾

3^h 45′	0″	diſtabat	16′	30″	in recta linea per cuſpid. cornuum.
4 0	0	—	14	10	per cornu auſtr. & Copernicum.
4 15	0	—	15	10	per Copernicum & Ecphantum.
4 30	0	—	16	15	per lim. auſtr. Coper. & bor. Ariſt.
4 45	0	—	18	45	per Copern. & limb. auſtr. Ariſtar.
5 0	0	—	22	35	per Bullialdum & Grimaldum.
5 15	0	—	26	30	a proximo limbo obſcuro ☾.
5 30	0	—	31	10	Et tanta præciſe erat Diameter ☾.

Anno 1727.

Mart. 1 veſpere ☾ ad β cornu boreum ♉, quod a cornu boreo ☾

11^h	28′	0″	diſtabat	39′	40″	
11	40	0	—	34	50	
11	51	0	—	31	45	; & tunc ſtella erat in recta cum cornu boreo ☾ & Calippo. Diameter ☾ 31′ 10″.

Mart. 2 mane a media nocte continuatio ejuſdem obſervationis; nempe

0^h 2′ 0″ diſt. β ♉ a cornu boreo ☾ 28′ 20″ in recta ex ſtella per cornu boreum ad Menelaum.

0^h 15′ 0″. diſt. β ♉ a cornu boreo ☾* 26′ 15″ in recta ex ſtella per cornu boreum ad Manilium.
0 33 0 diſt. β ♉ a cornu boreo ☾* 24′ 10″ in recta ex ſtella per cornua, Eratoſthenem & Tychonem ſtringendo limbum ortivum Platonis.
0 40 0 diſt. β ♉ a margine ☾* 25′ 10″ in recta per Platonem & Junctinum.
0 57 0 diſt. β ♉ a margine ☾* 27′ 20″ in recta per Archimedem & Junctinum.

Mart. 3 veſpere ſtella ι in ♊ a margine propiore boreo ☾*
8^h 30′ 0″ diſtabat 32′ 25″ in recta per Platonem & Bullialdum.
8 52 0 — 36 30 — — Archimedem & Bullialdum.
9 11 0 — 39 30 — — Aratum & Bullialdum.

Mart. 4 mane a media nocte tranſitus ☾* ad ſtellam υ in ♊, quæ a margine ortivo ſinus Iridum
0^h 0′ 0″ diſt. 39′ 30″ in recta cum Manilio & Langreno.
0 13 0 — 35 12 — — Timochari, & S. Theophilo.
0 29 0 — 31 20 — — Eratoſthene, & Sacroboſco.
Poſtea eadem ſtella a propiore margine boreo ☾*
0 59 0 diſt. 26′ 5″ in recta cum Platone & Conone.
1 17 0 — 26 0

1^h 23′ 0″ diſt. 26′ 55″ in recta cum Platone, & Erato-ſthene.

Deinde cœlum nubibus obductum.

Mart. 5 mane ſtella γ in ♋ a centro Tychonis

3^h	0′	0″	diſt.	27′	6″	in recta per Tych. & Cenſorin. & mar. criſ.
3	10	0	—	22	50	— — — Ariadæum.
3	19	0	—	19	12	— — — Menelaum.
3	28	0	—	16	12	— — — Ariſtotel.
3	37	0	—	15	22	— — — Promont. in terr. pruinæ.
3	44	0	—	15	48	— — — Bullialdum.
3	52	0	—	17	55	— — — Herigonium

Mart. 7 veſpere tranſitus ☾ infra ſtellam σ in ♌, quæ a centro Platonis

6^h	28′	0″	diſt.	10′	15″	in recta per Platon. & Tychon.
6	35	0	—	13	50	— — — ſtring. Copernic.
6	42	0	—	15	10	— — — Merſennum.
6	48	0	—	16	50	— — — Keppler.
6	55	0	—	19	50	— — — Grimald.
7	2	0	—	23	55	— — — Galilæum.

Deinde ſtella a margine propiore ☾

7	12	0	diſt.	19′	40″	in recta per Endymionem & Manilium.

7^h	$17'$	$0''$	diſt.	$22'$ $0''$	in recta per	Manilium & Bulliald.
7	23	0	—	23 40	—	Menelaum & Bulliald.
7	43	0	—	32 30	—	Plinium & Bullialdum.

Diameter Lunæ $32'$ $36''$.

Mart. 15 mane tranſitus ☾^{æ} ad boream ſtellæ γ in ♐, quæ a propiore margine auſtrali ☾^{æ}

4^h	$46'$	$0''$	diſt.	$39'$ $40''$	5^h	$23'$	$0''$	diſt.	$34'$ $20''$
4	56	0	—	38 25	5	32	0	—	33 5
5	11	0	—	36 30	5	39	0	—	32 15

6 4 0 ☾^{a} tranſeunte per meridianum ſtella in recta cornuum ☾^{æ} diſtabat a cornu auſtrino $31'$ $20''$.

Diam. ☾^{æ} $29'$ $45''$.

Mart. 16 mane tranſitus ☾^{æ} ad boream ſtellæ ξ in ♐, quæ a propiore margine auſtrali ☾^{æ}

5^h	$28'$	$0''$	diſt.	$48'$ $40''$
5	44	0	—	47 35
5	53	0	—	47 20

6 3 0 Circiter ſtella in linea per extremitates cornuum in eadem ferme diſtantia $47'$ $20''$.

Diam. ☾^{æ} $29'$ $50''$.

Mart. 17 mane ſtella ω in ♐ a propiore margine boreo ☾^{æ}

4^h	$59'$	$0''$	diſt.	$23'$ $15''$
5	10	0	—	20 15
5	17	0	—	18 45

Diamet. ☾^{æ} $28'$ $50''$.

5^h

5^h	$25'$	$0''$	diſt.	16	40
5	33	0	—	14	55
5	43	0	—	13	27

Maji 4 mane poſt mediam noctem tranſiit ☾ᵃ ad auſtrum ſpicæ ♍, quæ

0^h	$35'$	$0''$	diſtabat ab Ariſtarcho $32'$ $15''$ in recta per Reinoldum & Profatium. Tum a propiore margine ☾ᵃ					
0	52	0	diſt.	$24'$	$45''$	in recta	per	Heraclid. & Timoch.
1	5	0	—	22	10	—	—	Timoch. & Albateg.
1	20	0	—	20	30	—	—	Timoch. & Ptolom.
1	32	0	—	20	5	—	—	Archim. & Albateg.
1	45	0	—	20	30	—	—	Platone. & Alphonſ.
2	0	0	—	21	45	—	—	infra ſin. æſt. & Tych.

Diameter ☾ᵃ $32'$ $15''$.

Jul. 2 veſpere tranſiit ☾ᵃ ſupra ſtellam δ in ♐, cujus diſtantia a propiore margine auſtrino ☾ᵃ

9^h	$10'$	$0''$	erat	$22'$	$10''$	in recta cum Tychone & Platone.				
9	25	0	—	20	40	—	—	—	—	Timoch.
9	37	0	—	20	40	—	—	—	—	Copern.
9	48	0	—	21	20	—	—	—	—	Ariſtar.
11	6	0	—	33	20	—	—	Copern. & Ariſtarch.		

Diameter ☾ᵃ $30'$ $30''$.

Sept. 8 mane ☾^{a} tranſibat inter ſtellas φ & χ in ♉, quarum poſterior ab extrema cuſpide cornu auſtrini ☾^{a}

3^h	16′	0″	diſt.	35′	40″
3	32	0	—	40	20
3	50	0	—	46	5.

Sept. 9 mane ☾^{a} tranſivit infra cornu boreum ☾^{a} β ♉, cujus diſtantia a proximo margine boreo ☾^{a}

3^h	37′	0″	erat	33′	5″	4^h	46′	0″	erat	10′	15″
3	52	0	—	28	0	4	53	0	—	8	5
4	3	0	—	24	30	5	3	0	—	6	25
4	17	0	—	19	40	5	11	0	—	3	50
4	33	0	—	14	30	5	32	0	Stabat ſtella in cuſpide cornu borei vix ſemiminuto diſtans.		
4	41	0	—	11	20						

Tum diſtantia ſtellæ a centro Copernici

5	46	0	erat	13′	5″	6^h	1′	0″	erat	17′	5″
5	53	0	—	15	15	6	6	0	—	18	20

Diameter ☾^{a} erat 32′ 0″.

Oct. 20 veſpere ☾^{a} tranſivit ad auſtrum ſtellæ τ in ♐, quæ a cuſpide cornu borei ☾^{a}

8^h	9′	0″	diſt.	26′	30″	8^h	41′	0″	diſt.	16′	15″
8	28	0	—	20	55	8	52	0	—	14	45
8	36	0	—	18	45	Et tum ſtella erat in linea corn.					

Diameter ☾^{a} erat 30′ 55″.

Oct. 21 veſpere ☾ texit ſtellas ω & A in Trapezio ♐ borealiores, ſed occultatio ſtellæ ω accidit de die. Poſt Emerſionem ſtella ω a limbo occiduo ☾

6^h	5′	0″	diſt.	17′	15″	in recta cum Langreno & Cenſorino.
6	17	0	—	21	20	— — — — Exiguo.
6	30	0	—	24	55	— — — — S. Dionyſ.

Occultationem ſtellæ A vide Cap. 2.

Nov. 20 veſpere ☾ tranſiit infra ſtellam ι in ♒, quæ a cuſpide cornu borei ☾

5^h	32′	0″	diſt.	33′	20″	in recta per cornu bor. & Vitruv.
5	49	0	—	30	20	— — — — Plinium.
6	5	0	—	26	40	— — — — Menel.
6	10	0	Centrum ☾ cum ſtella, quam proxime ſimul culminarunt.			
6	19	0	Stella diſtabat a cornu boreo 25′ 20″ in recta per utrumque cornu tranſeunte.			
6	29	0	Diſtabat ſtella a margine boreo ☾ 24′ 6″ in recta per Ariſtotelem, & Manilium.			
6	44	0	Diſtabat ſtella a margine boreo ☾ 28′ 52″ in recta per Eudoxum, & Manilium.			

Nov. 24 veſpere tranſiit ☾ ad boream ſtellæ ε in ♓, quæ a medio Tychone

8^h	13′	0″	diſt.	26′	40″	in recta cum Tychone & Proclo.
8	28	0	—	25	23	— — — — Plinio.
8	43	0	—	24	58	— — — — Menelao
8	55	0	—	25	23	— — — — Arato.

9^h	8′	0″	diſt.	26′ 27″	in recta cum Tychone & Platonis marg. ort.	
9	22	0	—	28 48	— — — —	Copernic.
9	35	0	—	30 56	— — — —	Reinhold.
			Interea			
8	48	0	Culminaverat ☾ᵉ.			

Dec. 21 veſpere ſub mediam noctem tranſibat Luna infra ſtellam δ in ♓. Diameter ☾ᵉ erat 29′ 0″.
In apice boreo illuminationis ſtabat Anaxagoras, in confinio autem illuminationis Plato, & Eratoſthenes integre apparentes. Stellæ diſtantia a Platone

10^h	55′	0″	erat	16′ 12″	in recta ex Platone per Eudoxum.	
11	5	0	—	12 35	— — — —	littus bor. occid. mar. criſium.
11	12	0	—	10 40	— — — —	marg. auſt. Poſſidonii.
11	20	0	—	7 15	— — — —	Procl. & lit. inf. mar. criſ.
11	26	0	—	4 55	— — — —	Langren.
11	34	0	Stabat ſtella in apice boreo ☾ᵉ ad Anaxagoram, mox dein abſorpta, quod vide Cap. 2.			

Anno 1728.

Jan. 1 mane tranſitus ☾ᵉ ad boream Reguli ſive α ♌. Diameter ☾ᵉ 32′ 25″. Stella culminavit præciſe cum

			centro ☾æ. Diſtantia ſtellæ a proximo margine auſtrali ☾æ			
3h	16′	0″	erat	34′	20″	in recta ex Tych. per Archimed.
3	27	0	—	32	0	— — — Sinum æſtuum bor.
3	36	0	—	30	5	— — — Pitheam.
3	45	0	—	29	0	— — — Reinhold.
3	53	0	—	28	50	— — — Ariſtarch.
4	0	0	—	29	0	— — — Keppler.
4	8	0	—	29	25	— — — Cardanum

Jan. 8 mane tranſiit ☾a infra cor Scorpionis ſive α ♏ ſtella a cornu boreo ☾æ

5h	45′	0″	diſt.	49′	55″.	
6	0	0	—	51	10	in recta per ambo cornua.
6	15	0	—	53	45.	Diam. ☾æ 30′ 45″.

Jan. 23 veſpere ☾æ infra cornu boreum Tauri, ſive ſtellam β ♉, quæ a margine propiore boreo ☾æ

5h	5′	0″	diſt.	20′	42″	in recta per Platonem & Sacroboſcum:
5	50	0	—	16	0.	

Stella tranſiit Meridianum ante limbum lucidum occiduum ☾æ 6′ 6″, alta 78° 26′ 40″, altitudo limbi ſuperioris ☾æ erat 78° 22′ 50″.

8^h 0′ 0″ diſt. 23′ 28″ in recta per Albategn. & Copern. Regulus culminans diſtabat a margine propiore ☾æ 24′ 45″ in recta cum Snellio, & Copernico.

Maji 23 veſpere ☾ª infra α ♏, & ſtella a margine boreo ☾æ

9^h	20′	0″	diſt.	58′	0″.	
9	50	0	—	56	32	in recta per Platon. & infimum Sinum æſtuum,
10	0	0	—	56	10	— — — & medium Sinum æſtuum.
10	30	0	—	57	25.	Diam. ☾æ 32′ 50″. Sequente die

Maji. 24 mane a media nocte

0^h	11′	30″	culminavit α ♏, & 50″ poſt, nimirum
0	12	20	attigit Meridianum occidentalis limbus ☾æ, quæ
1	51	30	texit ſtellam τ ♏, ut notatum Cap. 2.

Jun. 19 veſpere ☾ª tranſiit proxime infra ſtellam π ♏, ſed fumoſæ nubes vix admiſerunt obſervationem, ex obſervata culminatione ſtellæ α ♏ 10^h 17′ 20″ correctum fuit utcunque horologium. 29′ ferme ante α ♏ ſcilicet 9^h 48′ attigit Meridianum ☾æ limbus occidentalis. Stella π a limbo boreo ☾æ

8^h	19′	0″	diſt.	7′	48″.	
8	26	0	—	9	25.	Diam. ☾æ 31′ 10″.
8	33	0	—	11	35.	
8	37	0	—	12	40	in recta media inter Zoroaſtr. & Endym.

Jul. 22

Jul. 22 veſpere ☾ tranſiit proxime ſupra ſtellam γ in ♑, quæ a margine propiore auſtrino ☾

11^h	29′	0″	diſt.	5′ 54″	e regione	Schikardi.
11	41	0	—	3 45	— —	Schilleri.
11	54	0	—	2 40	— —	Tychonis.
0	4	0	—	3 45	— —	Clavii.

Diameter ☾ 31′ 10″.

Aug. 29 mane β ♉ a limbo ☾

4^h	58′	0″	diſt.	48′ 25″.	
5	8	0	—	45 40.	Diam. ☾ 30′ 40″.
5	18	0	—	42 40.	

Ulteriorem appropinquationem obſervare impedivit tum nimia altitudo ☾, tum lux auroræ.

Oct. 12 veſpere tranſiit ☾ ſupra γ in ♑. Stella a limbo propiore auſtrino ☾ Diam. ☾ 30′ 30″.

8^h	6′	0″	diſt.	14′ 30″	in recta cum Platon. & Ptolomæo.
8	26	0	—	16 40	— — — — Albategn.
8	33	0	—	17 55	— — — — Hipparch.
8	58	0	—	22 25	— — — — Manilio & Ariſtillo.

Oct. 13 veſpere tranſitus ☾ ſupra ſtellam σ in ♒, quæ a limbo auſtrino ☾ Diam. ☾ 30′ 15″.

10^h	53′	0″	diſt.	26′ 0″	in recta per Tychon. & Plinium.
11	5	0	—	24 55	— — — — Menel.

T

11^h 18′ 0″ diſt. 25′ 10″ in recta per Tychon. & Manilium.
11 33 0 — 25 50 — — — — Ariſtillum.

Dec. 6 veſpere ☾ᵉ ſupra ♄, qui a margine auſtrino ☾ᵉ
7^h 18′ 0″ diſt. 17′ 55″ in recta ex cuſpide borea per marg. occid. Fracaſtorii.
7 25 0 — 20 30 — — S. Iſidorum.
7 33 0 — 23 0 — — Santbeckium.
7 40 0 — 25 10 — — Petavium.
Diameter 30′ 45″.

Anno 1729.

Nov. 23 veſpere ☾ᵉ ſupra ſtellam φ in ♐, quæ a cornu auſtrino ☾ᵉ
6^h 0′ 0″ diſt. 18′ 35″.
6 15 0 — 22 25.

Anno 1730.

Mart. 28 veſpere ☌ ♃ ☾ᵉ. Diameter ☾ᵉ 30′ 10″.
7^h 30′ 24″ Limbus occiduus ☾ᵉ attigit meridianum.
7 36 46 Culminavit ♃; hic a cuſpide boreali ☾ᵉ, quæ erat prope Anaximenem,
9 44 0 diſt. 40′ 45″ in recta cum Poſſidonio & Procl.
10 5 0 — 36 55 — — Calippo & Langren.
10 20 0 — 35 0 — — Julio Cæſare & Cyr.
10 43 0 — 34 10 — — Platone & Sacrob.

10^h	57′	0″	diſt.	34′	50″	in recta cum Platone & Archim.
11	12	0	—	35	40	— — Platone & Tychon.

Julii 25 veſpere ☌ ☾ cum α ♏. Diam. ☾^{ae} 33′ 30″. Stella a centro Platonis

10^h	51′	0″	diſt.	30′	10″.	
11	7	0	—	23	30.	
11	25	0	—	16	45	in recta cum Platone & Menelao.
11	35	0	—	13	25.	

Anno 1731.

Sept. 14 veſpere ☾^{a} ad boream ſtellæ ϑ in ♒, quæ a centro Tychonis.

6^h	30′	0″	diſt.	17′	20″	in recta cum Tychone & Ariadæo.
6	38	0	—	16	0	— — — — Menelao
6	50	0	—	16	0	— — — — Platone.
6	57	0	—	16	26	— — — — Copern.
7	22	0	—	27	15	— — — — Galilæo.
7	32	0	—	31	10	— — — — Grimaldi.
						cuſpide
				Diam. ☾^{ae} 32′ 25″		borea.

Oct. 8 veſpere parva, ſed lucida ſtellula, quæ eſt ad auſtrum ſecundæ ac tertiæ in capite Sagittarii,

7^h 31′ 0″ ſubiit ☾^{am}.

Anno 1732.

Maji. 7 veſpere limbus occiduus ☾ attigit meridianum,

10^h	$5'$	$0''$	Et tum limbus ſuperior ☾ erat altus $38° 0'$, præciſe
10	12	22	Culminavit ſpica ♍ alta $40° 23'$.

Aug. 31 veſpere tranſitus ☾ ſupra ſtellas *o* & *π* in capite ♐. Diam. ☾ $32' 50''$. Stella *o* a Tychone

7^h	$12'$	$0''$	diſt.	$13'$	$35''$	in recta cum Tychone & Ariadæo.
7	23	0	—	12	25	— — — — Calippo.
7	34	0	—	12	30	— — — — Platone.
7	42	0	—	13	35	— — — — Copern.
7	53	0	—	14	20	— — — — Bulliald.
7	59	0	Culminavit *σ*, ſeu humerus Sagittarii.			
8	9	0	Culminavit limbus occidentalis ☾.			
8	17	0	Stella *o* diſtat a Tychone $23' 20''$ in recta per Plinium & Copernicum.			

Dec. 20 veſpere tranſivit ☾ valde prope ad ſtellam *τ* in ♑.

5^h	$30'$	$0''$	Stabat ſtella in linea cornuum a cuſpide auſtrali proxime $5'$.

Anno 1733.

Jan. 27 ☾ culminavit ante Sirium $1' 20''$.

Jan. 28 ☾æ culminavit poſt Procyonem 5′ 10″.

Sept. 14 veſpere

7^h	56′	0″	Auſtralior ſtella ω in fronte ♏ erat in recta cum cuſpidibus cornuum ☾æ a cornu boreo diſtans 2′ 57″. Diam. ☾æ 29′ 55″.

Anno 1734.

Maji. 18 veſpere ſub mediam noctem ☾æ ad boream ♃vis, qui a margine auſtrino ☾æ

11^h	37′	0″	diſt.	16′	15″	in recta per	Ariadæum	& Tych.
11	47	0	—	15	25	— —	Menelaum	— —
11	57	0	—	14	25	— —	Manilium	— —
0	7	0	—	13	22	— —	Archimedem p. m. n. 19 Maji.	
0	15	0	—	12	55	— —	Eratoſthenem.	
0	22	0	—	12	45	— —	Pitheam.	
0	30	0	—	13	8	— —	Ecphantum.	
0	37	0	—	13	35	— —	Landſpergium & Tychonem.	
0	45	0	—	14	15	— —	Ariſtarchum	— —
0	32	45	Culminaverat cor Scorpii α ♏.					
0	40	15	Culminavit ♃ter.					

Jul. 17 mane a media nocte

0^h 22′ 32″ Limbus ☾æ occiduus ad meridianum. Diameter

☾ᵉ tranſiit meridianum inter 2′ 14″ penduli. Superior limbus ☾ᵉ altus 34° 21″.

0^h 32′ 45″ Stella β in ♉ erat in recta per Platonem & Tychonem diſtans a Platone 10′ 25″.

Octob. 7 veſpere

7^h 54′ 0″ ☾ᵉ margo occidentalis cum ♂, ad meridianum præciſe una altitudo limbi ſuperioris ☾ᵉ 37° 5′.

Octob. 8 veſpere poſt rictum Pegaſi 5′ ſcilicet

8^h 41′ 0″ ☾ᵉ margo occiduus ad meridianum, altitudo limbi ſuperioris ☾ᵉ 40° 40′.

Nov. 22 mane

6^h 15′ 0″ Tranſiit ☾ᵃ ſupra ſpicam ♍, quæ in proxima diſtantia tantum 2′ a limbo auſtrino ☾ᵉ diſtabat. Diameter ☾ᵉ erat in micrometro 30′ 50″.

Dec. 13 mane ☾ᵃ una cum Procyone attigit meridianum

2^h 6′ 12″ ſuperioris limbi, ☾ᵉ altitudo 66° 52′.

Anno 1735.

Feb. 4 veſpere

10ʰ 2′ 0″ Culminavit caput Caſtoris.

10 4 0 ☾ᵃ ad meridianum. Altitudo ſuperioris limbi 67° 7′.

Feb. 12 mane ☌ ☾ᵃ cum ſpica ♍

3ʰ 0′ 0″ Diameter ☾ᵃ in micrometro 31′ 45″, & tum ſpica in recta per Tychonem & littus ortivum maris ſerenitatis diſtabat a margine auſtrino ☾ᵃ 30′ 10″.

3 30 58 Culminavit ſpica alta 40° 20′, & diſtans a margine auſtrino ☾ᵃ 28′ 30″.

3 33 22 ☾ᵃ plene tranſiit meridianum. Altitudo inferioris limbi ☾ᵃ 40° 47′. Inter culminationem ſpicæ & culminationem Tychonis numeravi 1′ 13″ penduli, inter culminationem Tychonis & culminationem Platonis, qui culminabat ſimul cum Copernico, numerata 0′ 35″.

Febr. 13 mane

4ʰ 24′ 0″ Culminavit ſtella λ in ♍, alta præciſe 38° 0′, & infra ipſam etiam ☾ᵃ erat in meridiano. Altitudo limbi ſuperioris 37° 32′. Inter culminationem ſtellæ & plenum tranſitum ☾ᵃ numeravi 1′ 37″, inter ſtellam & Ariſtotelem 0′ 42″, inter ſtellam & Platonem 1′ 0″. Diameter ☾ᵃ in micrometro 31′ 15″.

Febr. 14 mane

5^h	10′	0″	☾ᵃ plene tranſierat meridianum. Altitudo inferioris limbi 34° 0′, dein poſt 4′ 38″ culminavit jugum, ſeu β ♎.

Febr. 15 mane culminavit ſtella β in fronte ♏ una cum ☾ᵉ. Altitudo

5^h	57′	40″	ſtellæ 31° 6′, & ☾ᵉ 31° 47′; a tranſitu ſtellæ ad plenum tranſitum ☾ᵉ numerata ſunt penduli 1′ 13″.

Mart. 19 mane

5^h	0′	0″	Diameter ☾ᵉ 30′ 10″. Stella *e* in ♐ ſupra ☾ᵃᵐ in linea cornuum diſtabat a cornu boreo 25′ 25″.

April. 27 veſpere

8^h	15′	0″	γ in ♊ infra ☾ᵃᵐ diſtabat a cornu auſtrino 59′ 50″, tum ☾ᵃ accedens ad parvam ſtellam, quæ ſtellam γ ad ortum ſequitur (vide Flamſted.), eam
9	59	30	obtexit. Ob loci incommoditatem non niſi minore tubo uti licuit.

Maji. 6 veſpere ☾ᵃ ad boream Lancis auſtralis, quæ a marg. auſtr. ☾ᵃ

8^h	53′	0″	diſt. 22′ 40″ in recta per Tychon. & Proclum.
9	10	0	— 18 10 — — — — Plinium.

9^{h}	18′	0″	diſt.	16′	20″	in recta per Tychon. & Menel.	
9	25	0	—	15	15	— — — —	Manilium
9	37	0	—	14	15	— — — —	Platon.
9	48	0	—	14	10	— — — —	Pitheam.
10	3	0	—	14	8	— — — —	Ariſtar.

Dec. 11 mane ☌ ♀ ☾^{æ} obſervata micrometro & pendulo per differentias declinationum, & aſcenſionum rectarum

5^{h}	49′	0″	♀ ad horarium.
5	49	35	☾^{æ} margo ortivus ad horarium.
			Diſtantia ♀^{is} a cornu boreo ☾^{æ} 39′ 0″.
5	55	5	♀ ad horarium.
5	56	25	☾^{æ} margo ortivus ad horarium.
6	0	0	♀ erat proxime in linea cornuum ☾^{æ}
			diſtans a cornu boreo ☾^{æ} 38′ 45″.
6	5	50	♀ ad horarium.
6	7	40	☾^{æ} margo ortivus ad horarium.
6	13	50	♀ ad horarium.
6	15	45	☾^{æ} margo orientalis ad horarium.
			Diſtantia ♀^{is} a cornu boreo ☾^{æ} 40′ 0″.
6	24	40	♀ ad horarium.
6	27	5	☾^{æ} margo orientalis ad horarium.
			Diſtantia ♀^{is} a cornu boreo ☾^{æ} 41′ 40″.
9	20	5	♀ culminat alta 37° 59′.
9	25	15	☾^{æ} margo orientalis ad meridianum.
			Altitudo inferioris limbi 36° 23′.

Dec. 27 veſpere

V

7^h	$10'$	$0''$	Palilicium diſtabat à margine auſtrino ☾^{æ} $52'$ $10''$.
8	40	0	Jam transacta proxima ☌ eadem ſtella a margine auſtrino ☾^{æ} $43'$ $5''$.
9	56	55	Stella & margo occiduus ☾^{æ} ſimul una ad meridianum. Stella alta $66°$ $3'$. Limbus auſtrinus ☾^{æ} altus $66°$ $31'$.

Anno 1736.

Jan. 9 mane ☌ ♀ ☾ obſervata, ut ſequitur:

4^h	$48'$	$40''$	♀ ad horarium.
4	49	26	☾^{æ} margo orientalis ad horarium, & margo boreus ☾^{æ} auſtralior ♀^{re} $12'$ $30''$.
5	10	30	♀ ad horarium.
5	11	48	☾^{æ} margo ortivus ad horarium, & margo ☾^{æ} boreus auſtralior ♀^{re} $13'$ $40''$. Sed hæ priores duæ operationes dubiæ nonnihil defectu aptæ illuminationis teleſcopii.
6	42	10	♀ ad horarium.
6	46	10	☾^{æ} margo ortivus ad horarium, & margo boreus ☾^{æ} auſtralior ♀^{re} $25'$ $55''$.
8	40	30	Culminat ♀ alta $33°$ $19'$.
8	46	45	☾^{æ} margo orientalis ad meridianum, altitudo limbi inferioris ☾^{æ} $32°$ $14'$.

Mart. 27 mane

5^h 45′ 0″ Cum ☾^{a} ſe poſt montes occidentales abſconderet, viſa mihi eſt levi aliqua penumbra infecta in margine ortivo; paulo enim poſt ejus occaſum inchoatura erat ejuſdem Eclipſis.

April. 19 veſpere
8^h 35′ 0″ Vidi ſtellam α in ♋ diſtantem a margine ☾^{a} 5′ 28″. In recta cum Furnerio, & Eratoſthene fuerat occultata a ☾^{a}, ſed oblitus fui obſervare.

Oct. 23 mane poſt mediam noctem
1^h 15′ 0″ Stella γ in ♉ diſtabat a margine auſtrali ☾^{a} 22′ 40″. In recta per Tychonem & Copernicum.

Anno 1737.

Febr. 6 veſpere
8^h 20′ 0″ Stella ξ occidentalis in capite Ceti erat in linea recta cum cornibus ☾^{a}, diſtans a cornu auſtrali 12′ 18″.

Mart. 8 veſpere circa
6^h 0′ 0″ ☾^{a} tranſiens ſupra ſtellam γ in ♉ reliquit eam a cornu auſtrino diſtantem 4′ 9″. Tum
10 1 0 præcedens ad auſtrum ſtellas ϑ erat in linea cornuum ☾^{a} diſtans a cornu auſtrali 14′ 25″. Ul-

teriorem acceſſum ☾^{æ} ad ſtellas ϑ non licuit obſervare ob nubes, quæ eas involvebant.

Nov. 16 mane poſt mediam noctem

1^h	$20'$	$0''$	Stella A in ♌ diſtabat a cornu auſtrino ☾^{æ} 2′ 45″, ad confinium lucis & umbræ.		

Dec. 3 veſpere ☾^{æ} ad ſtellam ξ occidentalem in Ceto obſervata, ut ſequitur.

1^h	$0'$	$0''$	Stella diſtabat a centro Platonis —	13′	14″
			eratque eod. in declinatione borealior	11	15
1	8	0	— diſtabat — — —	10	15
			— — — — borealior	9	35
1	18	0	— — — — — —	7	10
			— — — — borealior	6	30
1	25	0	Stella in eadem aſcenſione recta cum centro Platonis eodem borealior	5	55.
			Occultationem vide Cap. 2.		

Dec. 27 veſpere ☾^{æ} ad ♃^{vem}

3^h	$45'$	$4''$	Diſtabat a margine boreo ☾^{æ} 36′ 16″.
4	49	18	Culminat ♃^{ter} altus 44° 3′.
4	50	30	☾^{æ} in meridiano, altitudo limbi ſuperioris 43° 38′.
7	15	20	♃^{ter} in micrometro ad horarium.
7	19	40	☾^{æ} margo occiduus ad horarium, & margo boreus auſtralior ♃^{ve} 2′ 0″.

Anno 1738.

Jan. 2 veſpere ☾ᵃ ad γ ♉

9^h	10′	0″	☾ᵃ ad meridianum. Altitudo centri ☾ᵃ 65° 25′.
9	51	0	Stella γ in eadem aſcenſione recta cum centro Tychonis, eoque auſtralior 6′ 50″, diſtansque a margine ☾ᵃ præciſe, quantum ab eodem centrum Tychonis ſcilicet 3′ 25″.

Febr. 7 veſpere

8^h	15′	0″	Stella χ in ♌ ſupra ☾ᵃᵐ diſtans ab hujus margine contra Platonem 24′ 35″.

Nov. 15 veſpere ☾ᵃ ad ſtellam π in capite ♐.

6^h	10′	0″	Stella in linea cornuum diſtans ab auſtrino 8′ 50″,
7	0	0	Stella in eodem verticali cum ☾ᵃ centro diſtans a limbo auſtrino 17′ 40″.

Nov. 18 veſpere

6^h	29′	0″	Stella ι in ♒ diſtans exacte in linea dichotomiæ, ☾ᵃ diſtabat ab auſtrali limbo 17′ 40″.

Anno 1739.

Sept. 16 veſpere appulſus ☾ᵃ ad ſtellas ψ in ♒. Ut ſequitur.

8^h	57′	57″	Centrum Ariſtarchi in filo horario.

8^h	58′	16″	Stella ψ borealior ad idem filum.
			Borealior centro Ariſtarchi 10′ 55″.
9	1	17	Centrum Ariſtarchi in horario.
9	1	23	Stella eadem ad idem filum.
			Borealior centro Ariſtarchi 10′ 15″.
9	3	40	Centrum Ariſtarchi & ſtella ſimul in horario.
			Stella borealior centro Ariſtarchi 9′ 35″.
9	12	0	Centrum Platonis in horario.
9	12	35	Stella eadem in horario borealior centro Platonis 6′ 10″.
9	15	47	Centrum Platonis in horario.
9	16	13	Stella in horario borealior 5′ 45″.
			Occultationem vide Cap. 2 ſuo loco & tempore.

Oct. 17 veſpere

10^h	52′	30″	Stella ξ orientalior in Ceto diſtabat a margine ☾^{a} auſtrali contra Tychonem 1′ 25″.

Dec. 13 veſpere circa

8^h	15′	0″	Ex ſtellis δ in ♉ præcedentium clarior diſtabat a limbo boreo ☾^{a} 13′ 40″. Parva & obſcurior diſtabat 8′ 40″, quæ dein ſenſim propius accedens
8	45	0	diſtabat a limbo boreo ☾^{a} 4′.

Dec. 17 mane poſt mediam noctem ☾^{a} ad ♄^{um}.

1^h	24′	0″	☾^{a} in meridiano, altitudo centri 71° 45′.

2^h 4′ 0″ Culminat ♄^{us} altus 71° 36′.
Veſpere ☌ ♄^{no} ☾^{a} ſatis propinqua. ☾^{a} infra ♄^{um} tranſibat motu ferme parallelo in declinatione cum ♄^{no}. Experimento aliquoties repetito inter centrum Platonis, & ♄^{um}, nempe

9 0 0 ♄^{us} erat borealior centro Platonis 10′ proxime. Tum

9 10 0 — — — — — — 9′ 35″

9 25 0 — — — — — — 9 20

9 42 20 ♄^{us} erat præciſe in eadem aſcenſione recta cum centro Platonis, eodem borealior 9′ 12″. Poſtea adhuc videbatur minuiſſe uſque ad 9′ 0″. Diameter ☾^{æ} 29′ 50″. Plato a margine ☾^{æ} diſtabat 3′ 20″. ♄^{us} a margine boreo 5′ 40″.

Anno 1740.

Mart. 2 veſpere ☾^{a} tranſiit ad boream ſtellæ μ in capite Ceti,
7^h 30′ 0″ quæ in linea cornuum diſtabat a cornu auſtr. proxime 7′.

Maj. 29 veſpere

8^h 18′ 0″ ♀^{us} alta 25° 42′
8 24 0 ♄^{us} altus 22 2
8 33 0 ☾^{a} alta 21 42
} Omnes 3 in azimutho 10° 28′ ab occaſ. ad bor.

Videtur autem hæc obſervatio facta in Obſervatorio publico, quia domi nullum inſtrumentum azimuthale.

Sept. 9 veſpere ☾^{a} appropinquabat ſtellæ μ in capite Ceti ejus declinationem ſenſim tranſcendens. Culminante Fomahant ſtella μ erat præciſe in eadem declinatione cum cornu auſtrino ☾^{a}, præcedebatque ejus limbum orientalem in aſcenſione recta 26″ pend.

Nov. 26 veſpere appulſus ☾^{a} ad ſtellam τ in ♒.

7^h	18′	0″	Cuſpis auſtralis ☾^{a} in centro reticuli.
7	19	0	Stella in horario auſtralior cuſpide 5′ 30″.
7	24	30	Cuſpis ☾^{a} in centro reticuli.
7	25	30	Stella in horario auſtralior cuſpide 8′ 0″.
7	37	50	Cuſpis ☾^{a} in centro reticuli.
7	38	10	Stella in horario auſtralior cuſpide 11′ 30″.
7	45	0	Stella in linea dichotomiæ ☾^{a} auſtralior cuſpide 13′ 0″.

Dec. 3 mane

5^h	20′	0″	Oculus boreus ♉ erat in eadem aſcenſione recta cum centro Platonis, borealior eodem 12′ 30″. Plato diſtabat a limbo boreo ☾^{a} 4′ 0″.

Anno 1741.

Jan. 1 veſpere ☾^{a} tranſivit infra ♃^{vem}, obſervata ut ſequitur,

5^h 38′ 0″ ♃^{ter} diſtabat a margine boreo ☾^{a} 16′ 20″.

5^h	$50'$	$0''$	♃ diſtabat a margine boreo ☾æ 13′ 40″. Tum
5	59	30	Limbus occiduus ☾æ ad horarium filum.
6	0	24	♃ ad idem filum borealior limbo boreo ☾æ 13′ 0″.
6	1	50	Limbus ortivus ☾æ ad idem filum.
6	5	36	Limbus occiduus ☾æ ad horarium.
6	6	18	♃ ad horarium borealior limbo boreo ☾æ 12′ 30″.
6	7	55	Limbus ortivus ☾æ ad horarium.
11	43	0	☾æ culminantis altitudo centri 73° 15′.

Febr. 24 veſpere ☾æ ſupra ſtellam η in ♊. Ut ſequitur: ſcilicet ſtellæ a Tychone diſtantia

8^h	$57'$	$0''$	erat	$16'$	$24''$	in recta per Tychon. & Cenſorin.
9	3	0	—	15	0	— — — — Proclum.
9	10	0	—	13	40	— — — — Plinium.
9	18	0	—	12	20	— — — — Menel.
9	27	0	—	11	20	— — — — Platon.
9	32	0	—	11	40	— — — — Eratoſth.

CAPUT IV.

CONGRESSUS PLANETARUM MINORUM.

Anno 1718.

Sept.	18	mane	5ʰ 15′ 0″	♃ diſtat a ♀		34′	10″		
			6 15 0	—	—	32	7		
			7 45 0	—	—	30	0		
—	19	—	5 15 0	—	—	22	30		
			6 15 0	—	—	23	50		

Oct.	17	mane	5ʰ 45′ 0″	♂ diſtat a ♀	41′	40″	ad ort. au.
—	18	—	5 45 0	— —	27	0	ad auſtr.
				♂ diſt. ab ♥ ♌ proxime	52	0	
				♀ ab eadem circiter	48	30	ad occ.
—	19	—	5 45 0	♂ a ♀ — —	49	0	ad occ. au.
				♂ ab ♥ ♌	21	50	ad auſtr.
				♀ ab eadem	27	40	ad auſtr.

Nov.	16	mane	6ʰ 30′ 0″	♄ diſtat a ♀	51′	30″	ad bor.

Anno 1719.

Jul. 15	veſpere	8^h	30′	0″	♃ diſtat a ♀	1°	13′	0″	ad ortum.
— 17	—	7	30	0	— — —		32	15	ad occ.
		8	30	0	— — —		33	30	
— 18	—	8	30	0	— —	1	18	0	ad occ.

Anno 1720.

Oct. 27	mane	6^h	0′	0″	♃ diſtat a ♂	1°	7′	0″	ad ort.
— 28	—	6	0	0	— —	0	44	30	
— 29	—	6	0	0	— —	0	26	40	ad ort. bor.
— 30	—	6	0	0	— —	0	26	20	ad occ. bor.

Nov. 1	mane	6^h	0	0	♃ diſtat a ♂	1°	9′	30″	ad occ.

Anno 1721.

Dec. 13	mane	6^h	15′	0″	♃ diſtat a ♀	1°	10′	0″	ad auſtr.
		7	0	0	— —	1	8	45	
— 14	—	6	30	0	— —	0	36	15	
— 15	—	6	30	0	— —	1	10	0	circiter

— 28 — Stabant ♄ ♀ ☿ in linea recta & æquali diſtantia, ♄ in medio, ♀ ad occaſum auſtr., ☿ ad ortum boreum.

CAPUT IV.

CONGRESSUS PLANETARUM MINORUM.

Anno 1718.

Sept.	18	mane	5^h	15′	0″	♃ diſtat a ♀	34′	10″	
			6	15	0	— —	32	7	
			7	45	0	— —	30	0	
—	19	—	5	15	0	— —	22	30	
			6	15	0	— —	23	50	

Oct.	17	mane	5^h	45′	0″	♂ diſtat a ♀	41′	40″	ad ort. au.
—	18	—	5	45	0	— —	27	0	ad auſtr.
						♂ diſt. ab γ ♍ proxime	52	0	
						♀ ab eadem circiter	48	30	ad occ.
—	19	—	5	45	0	♂ a ♀ — —	49	0	ad occ. au.
						♂ ab γ ♍	21	50	ad auſtr.
						♀ ab eadem	27	40	ad auſtr.

Nov.	16	mane	6^h	30′	0″	♄ diſtat a ♀	51′	30″	ad bor.

Anno 1719.

Jul.	15	veſpere	8^h	30′	0″	♃ diſtat a	♀		1°	13′	0″	ad ortum.
—	17	—	7	30	0	—	—	—		32	15	ad occ.
			8	30	0	—	—	—		33	30	
—	18	—	8	30	0	—	—		1	18	0	ad occ.

Anno 1720.

Oct.	27	mane	6^h	0′	0″	♃ diſtat a	♂	1°	7′	0″	ad ort.
—	28	—	6	0	0	—	—	0	44	30	
—	29	—	6	0	0	—	—	0	26	40	ad ort. bor.
—	30	—	6	0	0	—	—	0	26	20	ad occ. bor.

Nov.	1	mane	6^h	0	0	♃ diſtat a	♂	1°	9′	30″	ad occ.

Anno 1721.

Dec.	13	mane	6^h	15′	0″	♃ diſtat a	♀	1°	10′	0″	ad auſtr.
			7	0	0	—	—	1	8	45	
—	14	—	6	30	0	—	—	0	36	15	
—	15	—	6	30	0	—	—	1	10	0	circiter
—	28	—	Stabant ♄ ♀ ☿ in linea recta & æquali diſtantia, ♄ in medio, ♀ ad occaſum auſtr., ☿ ad ortum boreum.								

Anno 1722.

Jan. 4	veſpere	6^h	15′	0″	♀ diſtat a ☿	1°	0′	55″	ad occ.
					Tum Lyra alta	29	43	0	
					☿ erat altus	4	10	0	
					Et poſt 2′ penduli				
					♀ alta item	4	10	0	
— 5	—	6	45	0	♀ diſtat a ☿	0	54	50	ad occ.
					Tum lyra alta	34	40	0	
					♀ erat alta	7	30	0	
					Et poſt 2′ pend.				
					☿ item altus	7	30	0	
— 7	—	6	45	0	♀ diſtat a ☿	4	48	25	ad occ.
					Tum lyra alta	35	45	0	
					☿ erat altus	6	42	0	
					Et poſt 2′ 30″ pend.				
					♀ alta item	6	42	0	
—11	—	6	30	0	♀ diſtat a ☿	1	0	30	ad occ.
					Tum lyra alta	40	36	0	
					♀ erat alta	6	40	0	
					Et poſt 5′ 30″ pend.				
					☿ altus item	6	40	0	
—13	—	6	30	0	♀ diſtat a ☿	1	15	0	
					Tum lyra alta	41	54	0	
					♀ alta erat	6	0	0	
					Et poſt 4′ 0″ pend.				
					☿ in eodem verticali,				
					in quo fuerat prius				
					♀ & poſt alia 3′ pen.				
					☿ item altus	6	0	0	

—14	—	9 45 0	♀ diſtat a ☿	1 26 40	
			eratque ♀ alta	8 24 0	
			Poſt 5′ pend.		
			☿ in eodem verticali,		
			ſed altus	7 50 0	
—15	—	6 30 0	♀ diſtat a ☿	1 31 0	

Anno 1723.

Jan.	1. mane	6ʰ 0′ 0″	♄ diſtat a ♃	54′ 30″	ad bor.
—	3 —	6 0 0	— —	48 40	
—	4 —	6 0 0	— —	47 0	
—	6 —	6 0 0	— —	44 20	
—	7 —	6 0 0	— —	44 50	
—	8 —	6 0 0	— —	45 50	
—	9 —	6 0 0	— —	47 0	ad occ. bor.
			♄ a ♂ —	0 20 0	ad occ. bor.
			♃ a ♂ —	53 45	ad ort. bor.
—	10 —	6 0 0	♄ a ♃ —	53 20	
			♃ a ♂ —	44 0	

Anno 1724. vacat.

Anno 1725.

Jan.	20 veſpere	5ʰ 20′ 0″	☿ diſtabat a ♃	31′ 17″	ad occ. bor.
—	21 —	5 35 0	— —	43 45	ad ort. bor.

Febr. 9 veſpere $5^h\ 45'\ 0''$ ♄ diſtat a ♀ $29'\ 15''$ ad occ.

Mart.	10	mane	5h	0′	0″	♀	diſtat a	☿	1°	0′	35″	ad ort.
—	12	—	5	30	0	—	—		1	1	25	
—	13	—	5	45	0	—	—		1	1	50	
—	13	—	5	45	0	♀	diſtat a	♂	0	42	40	
—	14	—	5	45	0	♀	—	♂	0	17	45	
						♀	—	☿	1	1	25	
						♂	—	☿	1	11	40	
—	15	—	5	45	0	♀	—	♂	0	9	40	
						♂	—	☿	0	50	30	
						♀	—	☿	1	0	0	
—	16	—	6	0	0	♃	—	♀	1	14	15	ad ort.
						♀	—	☿	0	57	0	ad bor.
						♂	—	☿	0	41	0	ad occ. bor.
						♀	—	♂	0	34	0	ad ort.
—	17	—	6	0	0	♀	—	♃	0	22	10	ad auſtr.
—	19	—	6	0	0	♃	—	♂	0	20	55	ad bor.
						♀	—	☿	0	51	40	ad bor.

Aug. 18 mane $6^h\ 56'\ 0''$ ♀ diſtat a ☿ $0°\ 40'\ 10''$ ad bor.

Anno 1726.

Jan. 19 veſp.	5h	30′	0″	♃	diſtat a ♀	—	1°	26′	0″	ad ort. au.
	6	30	0	—	—	—	1	24	30	
	8	0	0	—	—	—	1	23	0	

Jan. 20 veſp.	5	0	0	—	—	—	1	4	50	ad auſtr.
	7	30	0	—	—	—	1	3	10	
— 21 mer.	12	0	0	—	—	—	1	8	15	
a mer.	3	3	0	♃ culminans diſt. a ♀			1	11	40	
veſp.	6	0	0	♃ diſtat ♀			1	15	15	

Porro ♀ culminaverat

3^h 3′ 10″ nempe 10″ poſt ♃ alta 45° 25′ 0″ ad auſt.

igitur ♃ altus 44 13 0

Maji. 18 mane	4^h	0′	0″	♃ diſtat a ♀		0°	45′	30″	ad auſtr.
— 19 —	4	0	0	—	—	1	4	0	

Anno 1727.

April. 3 veſp.	6^h	55′	38″	☿ altus	—	10°	20′	0″	omnes in eodem verticali.
	7	10	0	♀ alta	—	6	30	0	
	7	16	32	♃ altus	—	6	30	0	
	8	45	45	cornu boreum ♉ in eod. verticali.					
— 9 —	6	45	10	♃ altus	—	9	55	0	in eod. verticali.
	6	49	45	♀ alta	—	13	9	0	
	8	38	30	oculus Tauri in eodem verticali.					
Item	6	56	40	☿ altus	—	13	31	0	in eod. verticali.
	7	13	10	♀ alta	—	8	52	0	
	9	1	0	oculus Tauri in eodem verticali.					

Anno 1728.

Mart.	22	mane	5^h	0'	0"	♄	infra ♀ diſt. ab ea		0°	45'	52"	
—	23	—	5	0	0	—	—	—	1	4	0	ad occ.

Dec.	15	veſp.	5^h	0'	0"	♂	diſtat a	♀	0°	45'	52"	ad occ.
	16		5	30	0	—	—		1	9	20	ad occ.

Anno 1729.

Jan.	6	veſp.	5^h	30'	0"	♄	diſtat a	♀	0°	45'	50"	ad occ.
—	8	—	6	0	0	—	—		0	41	0	
—	28	—	6	0	0	—	—	♂	1	1	0	ad ort.
—	29	—	5	45	0	—	—		0	28	20	ad ort.
—	30	—	5	45	0	—	—		0	27	30	ad occ.
—	31	—	5	45	0	—	—		1	0	25	ad occ.

Aug.	25	veſp.	4^h	30'	0"	♂	diſtat a	♃		52'	30"	ad occ.
—	28	—	4	30	0	—	—			45	15	ad bor.

Anno 1730. vacat.

Anno 1731.

Maji.	4	mane	4^h	30'	0"	♄	diſtat a	♀	1°	2'	45"	ad occ.

Maji. 5

Maji.	5	mane	4^h	30′	0″	♄ diſtat a ♀	0°	40′	6″	ad auſtr.

Nov.	20	mane	6^h	30′	0″	♃ diſtat a ♂	1°	1′	25″	ad ort.
—	21	—	7	0	0	— —	0	37	30.	
—	22	—	7	0	0	— —	0	18	45	ad auſtr.
—	23	—	4	45	0	— —	0	19	50	ad occ. auſt.
—	24	—	7	0	0	— —	0	42	15	ad occ.

Anno 1732.

Jan.	3	veſpere	5^h	0′	0″	♀ diſtat a ☿		57′	58″	ad bor.
—	5	—	5	0	0	— —		30	50.	
—	6	—	4	45	0	— —		31	45	ad occ.
			4	48	0	♀ alta —	9°	48	0	} in eodem.
			4	52	30	☿ altus —	9	16	0	} azimutho.
—	7	—	4	45	0	♀ diſtat a ☿	0	41	15	ad occ.
			4	52	0	♀ alta —	9	40	0.	
			4	54	0	☿ altus item	9	40	0.	
—	8	—	4	45	0	♀ diſtat a ☿	0	54	10	ad occ.
			4	48	0	♀ alta —	10	45	0.	
—	9	—	4	45	0	♀ diſtat a ☿	1	8	15.	
			4	50	0	♀ poſita eſt in ipſa interſectione filorum verticalis & horizontalis, & immoto tubo				
			4	53	55	☿ tranſiit verticale, &				
			4	54	50	☿ tranſiit horizontale.				
—	10	—	4	57	45	♀ alta —	9°	40′	0″.	

				Et remota a centro teleſcopii, ſeu interſectione filorum 34′, tum immoto tubo				
	5^h	0′	55″	♀ in verticali.				
	5	4	45	☿ in eodem verticali.				
	5	5	15	☿ in filo horiz. altus	9°	40′	0″.	
11	4	45	0	♀ alta — —	12	6	0	
	4	48	10	Et diſtans a centro teleſcopii 34′, tum immoto tubo				
	4	48	10	♀ in filo verticali.				
	4	51	50	☿ in eodem filo.				
	4	54	0	☿ in horizontali, altus	12	6	0.	

Oct. 30 veſp.	6^h	20′	0″	♃ diſtat a ☿		59′	30″	ad occ.

Anno 1733.

Oct. 6 veſp.	6^h	0′	0″	♃ diſtat a ♀	1°	20′	0″	ad bor.

Anno 1734.

Febr. 8 mane	6^h	15′	0″	♃ diſtat a ♂		58′	0″	ad ort.
9	6	30	0	— —		31	5	ad ort. bor.
	6	48	0	♂ culm. altus	29°	10	0	
	6	50	0	♂ —	29	21	0.	
10	6	30	0	♃ diſtat a ♂	0	16	50	

	6	47	0	♂ culm. altus	29°	3′	0″	
	6h	53′	0″	♃ —	29	20	0.	
11	6	30	0	♃ diſtat a ♂		35	50	ad occ. bor.
	6	44	0	♃ culm. altus	29	19	0	
	6	45	52	♂ —	28	56	0.	

Anno 1735.

Jan. 10 mane	6h	15′	0″	♃ diſtat a ☿	52′	10″	ad auſtr.
11	7	0	0	— —	29	55	ad occ.

Maji. 27 veſp.	8h	0′	0″	♂ cum ♀ & ε ♊ faciebant triangulum iſoſcel.			
				♂ diſtat a ♀	55′	10″	ad occ.
				♂ — ab ε	54	55	
				♀ — ab ε	39	50	ad auſtr.

Nov. 28 mane	6h	30′	0″	♂ diſtat a ♀	49′	25″	ad occ.
				occidentalior ea	3	0	pend.
				eademq. boreal.	20	30.	
29	6	30	0	♂ in ead. declinatione cum cornu auſtrino ♀^{ris} diſtans ab eo —	13	30	ad occ.
30	6	30	0	♂ diſtat a ♀	26	45	ad ort. auſt.
				orientalior ead.	13	30	pend.
				& auſtralior	23	5.	

Anno 1736.

Jan. 20 mane	6ʰ 17′ 0″	♂ altus	21° 7′ 0″
	6 25 0	♀ alta	24 29 0
		in eod. azim. ab auſt. ad ort. 32° 50′.	
— 21 —	6 10 0	♂ altus	20° 20′ 0″
	6 29 0	♀ alta	23 45 0
		in eodem azimutho ab auſtr. ad ort. 34° 18′.	

Febr. 19 mane	3ʰ 58′ 0″	♂ altus	16° 1′ 0″.
	4 6 0	♃ altus	17 35 0
		in azimutho eodem ab ortu ad auſtr. 41° 20′.	

Mart. 9 mane	5ʰ 30′ 0″	♃ diſtat a ♀	1° 2′ 0″ ad occ. auſt.
— 10 —	5 21 0	♃ altus	9 55 0
	5 32 0	♀ alta	11 36 0
		in eodem azimutho ab ortu ad merid.	34 45 0.
— 11 —	5 18 0	♃ altus	9 44 0
		♀ alta	11 37 0
		in eodem azimutho ab ort. ad merid.	34 30 0.

April. 19 mane	3^h	58′	0″	♂ altus	16°	1′	0″.	
	4	6	0	♃ altus	17	35	0	
				in eod. azim.				
				ab ort. ad mer.	41	20	0.	
— 20 —	4	19	0	♂ altus	19	4	0	
	4	24	0	♃ altus	20	20	0.	
				in eod. azim.				
				ab ort. ad mer.	45	33	0.	
— 21 —	4	30	0	♂ altus	20	59	0	
	4	33	0	♃ altus	22	2	0	
				in eod. azim.				
				ab ort. ad mer.	48	20	0.	
	4	50	0	♂ diſtat a ι ♐	0	8	53	
				orientalior ead.	0	0	35	pend.
				& auſtralior	0	3	25.	
— 23 —	4	3	0	♃ altus	19	3	0	
	4	7	0	♂ altus	18	16	0	
				in eod. azim.				
				ab ort. ad mer.	43	20	0.	

Anno 1737.

Jan. 6 veſp.	4^h	45′	0″	♃ diſtat a ♀	0°	54′	30″	
	5	0	0	♀ diſtat a δ ♐	0	50	40	ad occ. bor.
	5	27	0	♃ altus	18	50	0	
	5	28	0	♀ alta	17	40	0	
				in eod. azim.				
				ab occ. ad m.	41	40	0.	

Jan. 7 veſp.	5h 27′ 0″	♃ altus	18°	59′	0″
	5 33 0	♀ alta	18	31	0
		azim. ab occ.			
		ad merid.	41	44	0.
— 8 —	5 26 0	♃ altus	18	49	0
	5 34 0	♀ alta	18	33	0
		in azim. eod.			
		ab occ. ad m.	41	23	0.
— 9 —	5 32 0	♃ altus	17	24	0
	5 44 0	♀ alta	17	35	0
		ambo in azim.			
		ab occ. ad m.	39	22	0.
— 31 —	5 30 0	♃ diſtat a ☿	0	19	5
		eadem obſervata eſt diſtantia ab alio ſocio alio micrometro eod. tempore.			

Febr. 1 veſp.	5h 15′ 0″	♃ occid. ☿•	0°	5′	8″ penduli.
		eoque auſtral.			
		diſtantia	0	19	7 circuli.
		♃ a ☿ ead. duo-			
		bus micromet.	1	19	20.

Mart. 15 veſp.	7h 5′ 0″	♂ altus	52°	35′	0″
	7 31 0	♄ —	48	18	0
	7 50 0	Aldebar. altus	42	1	0
		omnes in azim.			
		ab occ. ad mer.	16	18	0.

Mart. 16 veſp.	8^h	11′	0″	♂ altus	40°	20′	0″	
	8	34	0	♄ altus	34	56	0	
	8	58	0	Aldebaran alt.	28	20	0	
				omnes in azim.				
				ab occ. ad mer.	2	50	0.	
Maji. 26 veſp.	8^h	0′	0″	☿ occidental. ♀re		0′	18″	penduli.
				eaque auſtralior		28	0	circuli.
— 27 —	7	32	0	☿ in horario.				
	7	42	30	♀ limbus occ. in				
				hor. & ♀ boreal. ☿		12	10.	
— 28 —	7	31	30	☿ in horario.				
	7	34	0	♀ limbus occ. in				
				hor. & ♀ boreal ☿		3	55.	
Jun. 1 veſp.	7^h	29′	0″	♀ in horario.				
	7	54	30	☿ in hor. bor. ♀		22′	0″	
Dec. 22 mane	6^h	21′	0″	♂ altus	8°	53′	0″	
	6	25	0	♀ alta	10	17	0	
				ambo in azim.				
				ab ort. ad mer.	36	37	0.	
— 23 —	6	20	0	♂ altus	8	40	0	
	6	25	0	♀ alta	10	0	0	
				ambo in azim.				
				ab ort. ad mer.	35	50	0.	

Dec.	24	mane	6^h	12′	0″	♂ altus	7°	35′	0″	
			6	20	0	♀ alta	8	47	0	
						ambo in azim. ab ort. ad mer.	35	35	0.	
—	25	—	6	20	0	♂ altus	9	2	0	
			6	31	0	♀ alta	10	5	0	
						ambo in azim. ab ort. ad mer.	37	35	0.	

Anno 1738.

Jun.	30	mane	4^h	0′	0″	♂ diſtat a ♃	0°	57′	10″	ad occ.
Jul.	1	mane	4^h	0′	0″	♂ in eadem proxime aſc. recta cum ♃ eod. auſtr.		35′	30″	proxime
—	2	—	4	0	0	♂ a ♃ diſtat		40	0	proxime
						♂ — auſtralior		23	12.	

Anno 1739. vacat

Anno 1740.

Sept.	22	mane	5^h	30′	0″	♃ diſtat a ♂	45′	20″.

Anno 1741. vacat

Anno 1742.

Anno 1742.

Sept. 20 mane	4^h	$35'$	$0''$	Regul. α ♌ alt.	$14°$	$2'$	$0''$	
	4	39	0	♀ alta	13	15	0	
	4	46	0	♄ altus	13	22	0	
	4	47	0	♃ altus	11	40	0	
				omnes 4 in azim.				
				ab ort. ad bor.	6	2	0.	
— 21 —	4	15	0	Regulus altus	11	4	0	
	4	22	0	♀ alta	10	8	0	
	4	27	0	♄ altus	10	18	0	
	4	28	0	♃ altus	8	30	0	
				omnes in azim.				
				ab ort. ad bor.	8	33	0	
	5	20	0	♀ occidental. ♄	0	4	2	penduli.
				eoque auſtral.	0	3	45	circuli.
— 22 —	5	15	0	♀ diſtat a ♄	0	25	20	
				oriental. eod.	0	0	18	penduli,
				& auſtralior	0	24	56	circiter.
— 23 —	5	15	0	♀ occident. ♃^{vi}	0	2	45	pend.
				eoque boreal.	0	24	0	circuli.

Anno 1743. vacat.

Anno 1744.

Dec. 31 mane 7^h $0'$ $0''$ ♄ diſtat a ♂ $0°$ $12'$ $15''$ ad auſtr.

Z

Anno 1745.

Jan.	1	mane	5^h	24′	0″	♄ culminat altus	51°	32′	0″	
			5	25	0	♂ — —	51	36	0	
			7	0	0	♄ diſtat a ♂	0	23	0	ad occ.
—	2	—	5	20	0	♄ culminat altus	51	31	0	
						diſtans a ♂	0	40	45	
			5	23	0	♂ culm. altus	51	31	0.	
—	14	—	4	22	0	ν ♍ culmin. alta	50	41	0	
			4	27	0	♄ culmin. altus	51	32	0	
			4	47	0	♂ culmin. altus	50	19	0	
			4	48	0	γ ♍ culm. alta	50	7	0.	

Mart.	29	veſp.	11^h	23′	0″	♄ culm. altus	53°	23′	0″
						♄ diſtans a ♂.	1	4	0
			11	27	0	♂ culmin. altus	53	31	0.
—	31	—	11	14	0	♄ culmin. altus	53	30	0
						♄ diſtans a ♂	0	45	30
			11	17	0	♂ culmin. altus	53	47	0.

CAPUT V.

CONGRESSUS PLANETARUM MINORUM CUM STELLIS FIXIS.

§. I.

SATURNUS CUM FIXIS.

Anno 1718.

Jan. 31 mane culminavit ♄ 4′ præciſe poſt ſtellam κ ♍.

Febr. 1 mane culminat ♄ poſt eandem ſtellam 4′ 10″.

Mart. 5 mane $5^h\ 30'\ 0''$ diſtat a κ ♍ 40′ 20″.

Mart. 6 mane $6^h\ 0'\ 0''$ diſt. a κ ♍ 37′ 56″.

Mart. 7 mane $6^h\ 30'\ 0''$ diſt. a κ ♍ 36′ 14″.

Mart. 8 mane $6^h\ 0'\ 0''$ diſt. a κ ♍ 34′ 11″.

Mart. 10 mane $6^h\ 0'\ 0''$ diſt. κ ♍ 28′ 24″.

Mart. 11 mane $6^h\ 0'\ 0''$ diſt. a κ ♍ 25′ 59″.

Mart. 13 mane $5^h\ 30'\ 0''$ diſt. a κ ♍ 22′ 23″.

Mart. 14 mane
$2^h\ 23'\ 40''$ ♄ in meridiano præciſe $40''$ poſt ϰ ♍ diſtans ab ea $19'\ 49''$.

Mart. 15 mane
$2^h\ 19'\ 36''$ ♄ in meridiano quam proxime ſimul cum ϰ ♍ diſtans ab ea $18'\ 27''$.

Mart. 16 mane ♄ diſtat ab eadem ſtella — $15'\ 22''$.

Mart. 22 mane. Mane
$1^h\ 6'\ 35''$ ſpica ♍ in meridiano.
1 52 50 ♄ in meridiano diſt. a ϰ ♍ $23'\ 14''$, & ab alia $32'\ 49''$.

Mart. 24 mane
$1^h\ 48'\ 10''$ ♄ in meridiano.
1 49 30 ſtella ϰ ♍ in merid.
5 30 0 ♄ diſtat a ϰ ♍ $22'\ 48''$.

Mart. 25 mane
$1^h\ 43'\ 30''$ ♄ in meridiano.
1 45 5 ſtella ϰ ♍ in merid. diſtans a ♄ $25'\ 18''$.

April. 14 veſpere ♄ in merid. $40'\ 50''$ poſt ſpicam ♍.

April. 16 veſpere
$11^h\ 31'\ 48''$ ſpica ♍ in merid.

April. 17 mane
$0^h\ 11'\ 40''$ ♄ in meridiano.

April. 19 veſpere
$11^h\ 19'\ 50''$ ſpica ♍ in merid.
11 58 20 ♄ in merid. una cum humero ſequente Centauri.

Anno 1719.

Maji. 1 ♄ culminavit præciſe una cum lance auſtr. α ♎.

Jun. 19 ♄ culminavit 11′ 45″ ante lancem auſtrin.

Sept. 19 veſpere circa 7^h 0′ 0″ ♄ diſtabat a ſtella per ♎ 20′ 30″.

Sept. 20 veſpere circa 7^h 0′ 0″ ♄ diſtat a *μ* ♎ 25′ 0″.

Sept. 22 veſpere circa 7^h 0′ 0″ ♄ a *μ* ♎ 33′ 20″.

Sept. 23 veſpere circa 7^h 0′ 0″ ♄ diſtat a *μ* ♎ 38′ 0″.

Anno 1720.

Febr. 29 mane diſtabat ♄ a ſtella ϑ ♎ ad occaſum hybernum 1° 19′.

Maji. 23 mane ſtabat ♄ inter complures fixas prope ſtellam ζ ♎ harum *c. d. e.* ſunt in eadem recta, diſtabatque ♄ ab *a* 1° 8′ 15″, a *b* 1° 4′, a *c* 37′ 30″, *a d* 35′ 45″, ab *e* 9′ 20″, *a* & *b* diſtantia 47′ 0″, *a* & *c* 34′ 10″

```
                 *a
            *c
      ♄ *e
        *d       *b
```

Jun. 1 veſpere ♄ tam propinquus erat ſtellæ *c*, ut parvo quidem teleſcop. diſcerni ab eadem nequiret; diſtabat autem ♄ a ſtella *a* 31′ 15″, a *b* 47′ 10″.

Jun. 2 veſpere circiter 9^h 0′ 0″ diſtabat ♄

a ſtella	*e*	34′	15″
	a	27	45
	c	2	30.

Jun. 5 veſpere poſt h. 9

♄ diſtabat a *c* 14′ 30″
a 19 50
e 47 0
b 49 0.

Stellæ *b* & *e* diſtabant mutuo 55′ 30″.

Jun. 7 veſpere circa
9^h 0′ 0″ diſtabat ♄ a *c* 18′ 15″, ab *a* 15′ 0″, a *b* 51′ 15″.

Jun. 14 veſpere circa
10^h 0′ 0″ ♄ diſtabat ab *a* 18′ 0″
ab *e* 43 40.

Dec.	10	mane	6^h	15′	0″	♄ diſtat	a ſtella	ν ♏		32′	20″	ad occ.
—	11	—	6	15	0	—	—	—		27	15	
—	14	—	6	15	0	—	—	—		10	40	
—	15	—	6	15	0	—	—	—		9	10	ad bor.
—	16	—	6	15	0	—	—	—		10	40	
—	17	—	6	0	0	—	—	—		15	45	
—	20	—	6	15	0	—	—	—		33	45	
—	21	—	6	0	0	—	—	—		40	0	
—	24	—	6	0	0	—	—	—		58	50	
—	25	—	5	30	0	—	—	—	1	5	0	ad ort.

Anno 1721.

Jan.	1	mane	6h	15′	0″	♄ diſtat a ψ Ophiuchi	1°	6′	0″	ad occ.
—	2	—	6	0	0	— — —	0	58	50	
—	5	—	5	45	0	— — —	0	44	0	
—	6	—	6	15	0	— — —	0	37	30	
—	10	—	6	0	0	— — —	0	19	10	
—	12	—	6	30	0	— — —	0	15	40	ad bor.
—	16	—	6	30	0	— — —	0	26	0.	

Jun.	22	veſp.	♄ in merid. altus	31°	30′	0″	
			diſtans a ν ♏	0	47	0	ad ort.
—	23	—	♄ diſtat ab eadem ν ♏	0	44	30	
—	24	—	— — —	0	41	30	
—	25	—	— — —	0	37	40	
—	26	—	— — —	0	35	10	
—	27	—	— — —	0	32	15	
—	29	—	— — —	0	27	45	
—	30	—	— — —	0	25	20.	

Jul.	1	veſp.	♄ diſtat ab eadem ν ♏	0°	23′	0″
—	2	—	— — —	0	21	0
—	3	—	— — —	0	19	30
—	4	—	— — —	0	18	10
—	5	—	— — —	0	17	40
—	8	—	— — —	0	16	0
—	9	—	— — —	0	16	15
—	11	—	— — —	0	18	45.

Jul.	25	veſp. 8h 0' 0" circiter ♄ diſt	a ν ♏	0°	34'	50"	ad occ.
			& a β ♏	1	13	50.	
—	29	veſpere eodem tempore.	a ν ♏	0	37	0	
			a β ♏	1	10	20.	

Aug.	4	veſpere eodem tempore.	a ν ♏	0°	36'	45"	ad occ.
			a β —	1	8	15	
—	7	— — — —	a ν —	0	36	20	
			a β —	1	8	15	
—	11	— — — —	a ν —	0	35	0	
			a β —	1	9	20	
—	15	— — — —	a ν —	0	31	0	
			a β —	1	10	50	
—	27	— — — —	a ν —	0	10	50	
—	29	— — — —	a ν —	0	7	15	
—	30	— — — —	a ν —	0	5	35	
—	31	— — — —	a ν —	0	4	15	ad bor.

Sept.	2	veſpere eodem tempore.	a ν ♏	0°	5'	30"	
—	4	— — — —	a ν —	0	10	15	
—	9	— — — —	a ν —	0	25	0	ad ort.

Anno 1722.

Febr. 2 mane 6h 0' 0" ♄ diſtat a ſtella ρ in pede dextro Ophiuchi 1° 12' 30" ad occ.

— 3 — 6 0 0 — — — 1 9 10.

Febr. 4

Febr. 4 mane 6^h 0′ 0″ ♄ diſtat a ſtella ρ in pede dextro Ophiuchi 1° 4′ 30″ ad occ.

—	6	—	6	30	0	—	—	—	0	56	40			
—	7	—	6	30	0	—	—	—	0	53	20	✱ρ		
—	12	—	6	30	0	—	—	—	0	37	10	♄		
—	13	—	6	30	0	—	—	—	0	35	30			
—	20	—	6	30	0	—	—	—	0	29	50.			

Et ab alia orientaliore ad occ. 48′ 35″ ut ſupra.

—	22	—	5	45	0	♄ a ſtella ρ Ophiuchi			0°	31′	50″
—	23	—	5	45	0	—	a ρ	—	0	32	25
						ab orientaliore			0	38	25
—	24	—	5	45	0	—	a ρ	—	0	33	40
						ab orientaliore			0	35	50
—	26	—	5	45	0	—	a ρ	—	0	37	10
						ab orientaliore			0	31	35.

Porro diſtantia ſtellarum ρ & alterius orientalioris eſt. 53′ 45″.

Mart. 4 mane 5^h 30′ 0″ ♄ diſt. a ρ — 0° 47′ 45″
ab orientaliore 0 17 30.
Capta rurſum diſtantia harum duarum ſtellarum. 0 54 0

—	5	—	5	30	0	—	a ρ	—	0	49	0
—	6	—	5	30	0	—	a ρ	—	0	49	50
—	7	—	5	30	0	—	a ρ	—	0	51	0
						ab orientaliore			0	14	0.

Mart. 8 mane 5^h 30′ 0″ ♄ diſt. a ę — 0° 52′ 50″
ab oriental. 0 12 0 ad auſtr.
— 9 — 4 0 0 — a ę — 0 56 15
ab or. 0 11 30
— 11 — 5 30 0 — a ę — 1 0 10
ab or. 0 11 10
— 14 — 5 30 0 — a ę — 1 1 30
ab or. 0 11 45
— 15 — 5 30 0 — a ę — 1 3 10
ab or. 0 12 0
— 16 — 5 15 0 — a ę — 1 4 50
ab or. 0 12 20
— 17 — 5 30 0 — a ę — 1 5 30
alt. mer. ♄ 28 45 0
— 22 — 5 0 0 — a ę — 1 9 0
ab or. 0 15 20
— 24 — 5 0 0 — a ę — 1 9 30
ab or. 0 15 55
— 27 — 5 0 0 — a ę — 1 11 0
ab or. 0 17 0
— 29 — 4 0 0 ♄ diſt. a ę — 1 10 0 ab orientaliore 16′ 40″.

April. 2 mane 4^h 30′ 0″ ♄ diſtat a ę 1° 9′ 10″ ab or. 15′ 30″
altit. merid. ♄ 28° 45″
— 6 — 5 0 0 — a ę 1° 6′ 30″ ab or. 13 15
— 8 — 5 0 0 — a ę 1 5 15
— 10 — 5 0 0 — a ę 1 3 0 ab or. 10 15
— 12 — 4 30 0 — a ę 1 0 25 ab or. 9 10.

April.	19	man.	4^h	0′	0″	♄ diſtat	a ϱ	49′	0″	alt. m. ♄	30°	0′
—	20	—	4	0	0	—	a ϱ	47	20	ab ori.	12	10
—	24	—	4	0	0	—	a ϱ	40	10	ab ori.	21	20
—	28	—	4	0	0	—	a ϱ	32	0			
—	30	—	4	0	0	—	a ϱ	28	35	ab ori.	35	25.

Maji.	4	mane	4^h	0′	0″	♄ diſtat	a ϱ	23′	30″			
—	7	—	3	30	0	—	a ϱ	23	20	ab ori.	57′	10″.

Anno 1723.

Mart. 20 mane 5^h 0′ 0″ ♄ diſtabat a ſtella μ in arcu Sagittarii 1° 10′ 35″, & a parva vicina 35′ 50″.

Anno 1724.

Mart. 30 mane 5^h 0′ 0″ ♄ diſtat a ſtella ξ in capite Sagittarii ad auſtr. ort. 1° 15′ 0″, & a ſtell. o proxime ſequente 40′ 0″ ad occ.

April.	4	mane	5^h	0′	0″	♄ diſt. ab ead. o			34′	45″	
—	10	—	5	0	0	—	—	—	27	35	ad occ.
—	17	—	4	30	0	—	—	—	24	5	
—	20	—	4	30	0	—	—	—	32	0	
—	24	—	4	30	0	—	—	—	24	5.	

Nov. 24 veſp. 6^h 0′ 0″ ♄ diſtat a 2 ſtellulis ν in naſo Sagittarii ab occidentaliore 13′ 15″.
ab orientaliore 17 55.

Dec. 11 veſp. 5^h 30′ 0″ ♄ diſtat a ſtel. ο in capite Sagittarii 50′ 0″.

Anno 1726. vacat

Anno 1727.

April. 15 mane 4^h 30′ 0″ ♄ diſtabat a ſtel. ι ♐ 36′ 30″ ad bor.

Jul. 13 mane 4^h 0′ 0″ ♄ diſtat ab eadem 33′ 30″ ad bor. occ.
— 15 — 4 0 0 — — — 38 36.

Aug. 17 veſp. 8^h 0′ 0″ ♄ retrogradus diſtat a ſtella θ ♐ ad ortum 55′ 30″, & a parva ſtella θ ſequente, ad ortum 30′ 30″.
— 19 — 7 45 0 ♄ diſt. a θ ♐ 41′ 35″, & a parva 21′ 45″.
— 21 — 8 0 0 — a θ ♐ 42 15
— 29 — 9 0 0 — a θ ♐ 25 35 ad auſtr., & a parva 19′ 40″ ad occ.

Porro ſtella θ ♐ diſtat ab hac parva ſtellula 27′ 55″.

Sept. 7 veſp. 8ʰ 0′ 0″ ♄ diſtat a θ ♐ 38′ 0″ ad auſtro occaſum.

Nov.	17	veſp.	5ʰ	45′	0″	♄ diſtat a θ ♐		39′	28″	ad auſtro occ.
—	18	—	5	45	0	—	—	35	12	
—	19	—	5	45	0	—	—	33	5	
—	20	—	5	30	0	—	—	31	10	
—	21	—	5	15	0	—	—	29	0	
—	22	—	5	15	0	—	—	27	20	
—	23	—	5	15	0	—	—	25	50	
—	24	—	5	15	0	—	—	24	58	
—	25	—	5	15	0	—	—	23	54	
—	26	—	5	15	0	—	—	24	32	
—	28	—	5	15	0	—	—	27	57	ad auſtr.

Dec. 30 veſp. 6ʰ 0′ 0″ ♄ diſtat a ſtella ι ♐ 43′ 30″ ad occ.

Anno 1728.

Jan.	1	veſp.	6ʰ	0′	0″	♄ diſtat a ſtel. ι ♐			36′	40″
—	4	—	5	15	0	—	—	—	23	40
—	6	—	5	15	0	—	—	—	20	30
—	7	—	5	15	0	—	—	—	21	7.

Jan. 9 veſp. $5^h\ 15'\ 0''$ ♄ diſtat a ſtella ι ♑ $28'\ 35''$
— 10 — 5 15 0 — — — 32 50.

April. 14 mane $4^h\ 30'\ 0''$ ♄ diſt. a ſtella ι ♒ $55'\ 0''$ ad bor.
— 15 — 4 30 0 — — — 54 35
— 17 — 4 30 0 — — — 54 35.

Jul. 22 mane $10^h\ 30'\ 0''$ ♄ diſt. ab ead. ι ♒ $44'\ 10''$ ad ort. bor.
— 24 — 10 30 0 — — — 42 25
— 31 — 9 0 0 — — — 36 5 fermę in eodem verticali.

Anno 1729.

Jan. 6 veſp. $5^h\ 30'\ 0''$ ♄ diſt. ab eod. ι ♒ $45'\ 50''$ ad occ.
— 8 — 6 0 0 — — — 41 0.

Oct. 30 veſp. $7^h\ 0'\ 0''$ ♄ diſt. a ſtel. σ ♒ $56'\ 20''$ ad ort.
— 31 — 7 0 0 — — — 56 20.

Anno 1730. 1731. 1732. vacant.

Anno 1733.

Oct. 29 veſp. ♄ in meridiano una cum ſtella β arietis altus $57°\ 32'$.

Anno 1734.

Dec.	16 veſp.	8^h 47′ 0″	♄ in merid. altus 61° 39′ ſtans ad ortum parvæ ſtellæ inter ξ & σ in pedibus arietis dextro anteriorum, & ſiniſtro poſteriorum, quaſi in linea recta propior tamen ad σ quam ad ξ. Hæc parva ſtella, quam hic vocabo (*a*), culminavit ante ♄ 1′ 22″ penduli.
—	19 —	primum	culminavit ſtellula *a* alta 61° 18′, poſt 45′ culminavit ♄ diſtans a ſtella *a* 20′ 40″, ex hac diſtantia & differentia aſcenſionis rectæ prodit differentia declinationis 17′ 30″, quibus ♄ erat borealior ſtellula.
—	20 —	8 29 0	culminavit ſtellula *a*, & poſt 35″ ♄ diſtans ab ea 19′ 17″, & altus 61° 38′, unde differentia declinationis 17′ 11″, & aſcenſionis 8′ 45′ circuli.
—	21 —	8 25 0	culminavit primum ſtellula *a*, tum poſt 26″ ♄ altus 61° 37′ diſtans *a* ſtellula 18′ 8″, unde differentia declinationis 16′ 56″, & aſcenſionis rectæ 6′ 30″ circuli.
—	24 —	— —	culminavit ♄ 8″ poſt ſtellam *a* altus 61° 36′.
—	25 —	— —	culminavit ♄ 4″ penduli poſt ſtellam *a*.
—	26 —	8 0 0	circiter culminat ♄ præciſe una cum ſtellula *a*, aut ſemi-ſecundo citius altus 61° 36′, & diſtans ab ea in boream 15′ 10″.

Dec. 27 veſp. 8^h 0′ 0″ culminavit ♄ 5″ penduli ante ſtellam *a* diſtans ab ea 16′ 30″.

Anno 1735.

Jan. 2 veſp. 8^h 0′ 0″ culminat ♄ 40″ penduli ante ſtellam *a* altus 61° 35′.

— 4 — 7 21 50 culminat ♄, poſt 42″ culminat ſtella *a* diſtans a ♄ 18′ 20″, unde ♄ borealior ſtella 15′ 2″.

Anno 1736. vacat

Anno 1737.

Jan. 30 veſp. 5^h 30′ 0″ ♄ diſtabat a ſtella *ε* ♉ 52′ 0″ in boream.

Febr. 16 veſp. 6^h 13′ 0″ circiter culminat ♄ ſimul una cum hac ſtella *ε* ♉ altus 69° 39′, diſtans a ſtella 58′ 30″ ad boream.

Anno 1738. & 1739. vacant

Anno 1740.

Sept. 18 veſp. 5^h 30′ 0″ ♄ diſtabat a ſtella *δ* ♋ 18′ 20″ ad boream

			ream ſecutus eandem in meridiano 1″ vel 1½″ penduli.
Sept. 19	mane	5ʰ. 30′ 0″	♄ diſtabat ab eodem 17′ 25″, ſecutus eam in meridiano 23″ penduli, differentia declinationis 16′ 25″.
— 20	—	— —	♄ diſt. ab eadem 19′ 10″, ſecutus eam in meridiano 46″ penduli, eadem borealior 15′ 20″.

§. II.

JUPITER CUM FIXIS.

Anno 1718.

Mart. 12	veſp.	7ʰ	2′	25″	Sirius in meridiano.
— —	—	8	16	50	♃ in meridiano.
— 13	—	6	58	30	Sirius in meridiano.
— —	—	8	12	50	♃ in meridiano.
— 24	—	6	22	13	Sirius in meridiano.
— —	—	7	14	48	♃ in meridiano.
— —	—	7	35	50	Procyon in meridiano.

Jun. 19 veſp. 8ʰ 30′ 0″ ♃ diſtat ab aſello auſtrino ♋ 32′ 48″ ad bor.

Sept. 26 mane	5^h	30′	0″	♃ diſt. a Regulo	28′	40″	ad occ. bor.
— 27 —	5	30	0	— — —	21	30	
— 28 —	5	30	0	— — —	18	15	
— 29 —	5	30	0	— — —	22	10.	

Nov. 4 mane	6^h	0′	0″	♃ diſt. a ſtel. ρ ♌	48′	30″	circ.
— 5 —	6	0	0	— — —	44	30	ad bor.

Anno 1719.

April. 1 veſp.	7^h	0′	0″	♃ diſt. a Regulo ♌	49′	0″
— 7 —	9	0	0	— — —	47	45
				culminavitque poſt Regulum 40″ penduli.		
— 9 —	9	0	0	♃ culminavit poſt Regulum 25″ penduli, diſtans ab eo 48′ 30″.		
— 10 —	9	0	0	♃ culminat poſt Regulum 15″ pend. diſtans ab eo 49′ 0″.		

Maji. 4 veſp.	9^h	0′	0″	♃ diſtat a Regulo ♌	47′	45″
— 5 —	—	—	—	— —	46	40
— 7 —	—	—	—	— —	43	0
— 9 —	—	—	—	— —	42	20
— 11 —	—	—	—	— —	42	20
— 12 —	—	—	—	— —	43	15
— 13 —	—	—	—	— —	44	40.

Jun. 27 veſp. 9^h 0′ 0″ ♃ diſt. a ſtella ρ ♌ 1° 24′ 0″.

Jul.	1	veſp.	9^h	0′	0″ ♃ diſt. a ſtella ρ ♌			53′	40″
—	2	—	—	—	—	—	—	50	36
—	5	—	8	0	0 —	—	—	48	0
—	6	—	—	—	—	—	—	50	30
—	7	—	—	—	—	—	—	53	40.

Oct. 15 mane 6^h 0′ 0″ ♃ diſtat a ſtella β in ala Virginis verſus ortum boreum 31′ 30″

— 16 — — — — — — — 39 40.

Nov. 4 mane ſtabat parva quædam ſtella in linea recta cum ♃ & ejus ſatellitibus hoc ſitu ✱ 4* 2* ⊙, 1* 3* ſtella exiſtente ad ortum.

— 5 — eadem ſtellula videri non potuit latens haud dubie poſt ♃^{vem}, ſatellites ſtabant hoc ſitu 4* 1* ⊙ 2* 3*.

— 6 — 5^h 15′ 0″ ſtellula, quæ ante biduum ad ortum nunc erat in pari diſtantia ad occaſum hoc ſitu 4* 3* ⊙ 1* 2* ✱ erantque ſimul 3^{tius} & 4^{tus} ſatelles in conjunctione aut proxime illam.

—	25	—	6	0	0 ♃ diſt. a ſtella ν ♍			12′	30″ in auſtr.
—	26	—	—	—	—	—	—	14	45
—	30	—	—	—	—	—	—	41	0.

Dec. 1 mane 6^h 0′ 0″ ♃ diſt. a ſtella ν ♍ 49′ 0″.

Anno 1720.

Febr. 22 veſp. 10^h 30′ 0″ ſtabat ♃ cum tribus ſatellitibus inter 2 ſtellulas hoc ſitu * .₃ ˙² .₁ ○ * 4^{tus} ſatelles haud dubie latebat in umbra ♃^{is}.

Mart. 9 veſp.	10^h	30′	0″	♃ diſt.	a ſtella	η ♍	1°	13′	45″	
— 12 —	7	30	0	—	—	—	0	51	30	
— 13 mane	6	0	0	—	—	—	0	47	30	
— — veſp.	8	0	0	—	—	—	0	44	30	
— 14 mane	5	30	0	—	—	—	0	42	40	
— — veſp.	8	0	0	—	—	—	0	39	15	
— 15 —	9	30	0	—	—	—	0	31	20.	

Hoc veſpere h. 10¾ in vicinia ♃^{is} ſubito exarſit meteoron, igneum illuſtri flamma. Luce ſplendidiore cito extincta, remanſit albor per modum nebuloſæ ſtellæ per aliquot minuta ſpectabilis, donec & ipſe diſpareret.

— 19 mane	5	0	0	♃ diſt.	a ſtella	η ♍	14′	30″	ad bor.
— 20 veſp.	8	0	0	—	—	—	17	0	
— 22 —	8	0	0	—	—	—	29	30	ad occ.
— 23 —	10	0	0	—	—	—	35	10	
— 24 mane	3	0	0	—	—	—	38	0	
— — veſp.	9	0	0	—	—	—	43	15.	

Nov.	10	mane	6^h	0′	0″	♃ diſt. a ſtella *m* ♍			35′	50″	
—	11	—	—	—	—	—	—	—	36	15	
—	12	—	—	—	—	—	—	—	40	30.	

Anno 1721.

Jan.	2	mane	6^h	0′	0″	♃ diſt. a ſtella λ ♍			1°	8′	15″	
—	5	—	5	45	0	—	—	—	0	53	0	
—	6	—	6	15	0	—	—	—	0	50	0	
—	10	—	6	0	0	—	—	—	0	44	20	ad bor.
—	12	—	6	30	0	—	—	—	0	45	45	
—	18	—	6	0	0	—	—	—	1	7	0.	

Mart.	24	mane	6^h 0′ 0′	♃ diſt. ab eadem		1°	10′	45″.
—	26	—	♃ diſt. a λ ♍	—	—	1	7	50.

April.	6	mane	♃ diſt. a λ ♍	—	—	1°	9′	15″.

Anno 1722.

Jan.	11	mane	6^h	15′	0″	♃ diſtat a β ♏	—			12′	0″	ad occ.
						& ab ω ♏ borea	—			49	0	ad bor.
—	12	—	5	0	0	♃ diſt. a β ♏	9′	50″	ab ω	42′	40″	
—	13	—	6	0	0	— —	15	45	—	37	10	
—	14	—	6	30	0	— —	23	50	—	34	30	
—	15	—	6	30	0	— —	32	50	—	35	0	

Jan. 16 mane 6^h 30′ 0″ ♃ d. a β ♏ 41′ 50″ ab ω 37′ 10″
& a ſtella ν ♏ 1° 1′ 0″ ad occ.
— 17 — 6 45 0 ♃ diſt. a β ♏ 0° 52′ 10″ ab ω 42′ 25″
& a ν ♏ 0 55 30
— 19 — 6 30 0 — a β ♏ 1 10 50 — 55 50
& a ν ♏ 0 47 20
— 20 — 6 0 0 — a ν ♏ 0 44 20
— 22 — — — — a ν ♏ 0 48 0.

Febr. 2 mane 6^h 0′ 0″ ♃ diſtat a ſtella ψ in pede dextro Ophiuchi — 1° 12′ 30″ ad occ.
— 3 — 6 0 0 — — — 1 6 0
— 4 — 6 0 0 — — — 1 0 30
— 6 — 6 15 0 — — — 0 49 30
— 7 — 6 30 0 — — — 0 45 15
— 12 — 6 30 0 — — — 0 40 30
— 13 — 6 30 0 — — — 0 44 0
— 20 — 6 0 0 ♃ diſt. a ψ Oph. 1° 9′ 10″ ad or. auſt.
& a ſtella ω in Calcaneo Ophiuchi — 1 6 10 ad occ. bor.
Stabatque ♃ inter utramque ſtellam, modice deflectens a linea recta ad occaſum auſtralem, ut in adjecto hic ſchemate.

* ψ

⁝ ⁝ ⊙ ⁝ ⁝

ω *

— 22 — 5 45 0 ♃ diſt. a ψ 1° 18′ 30″ & ab ω 56′ 45″
— 23 — 5 45 0 ♃ diſt. ab ω 0 52 30
— 24 — 5 45 0 ♃ diſt. ab ω Ophiuchi 48′ 15″
— 26 — 5 45 0 — — — 40 30 ad occ. bor.

Mart. 4	mane	5^h	30′	0″	♃ diſt. ab ω Ophiuchi	27′	47″	ad bor.
— 5	—	5	45	0	— — —	27	10	
— 6	—	5	30	0	— — —	27	0	
— 7	—	5	30	0	— — —	27	0	ad bor.
— 8	—	5	30	0	— — —	27	20	
— 11	—	5	30	0	— — —	28	10	
— 14	—	5	30	0	— — —	30	50	
— 15	—	5	15	0	— — —	32	0	
— 16	—	5	30	0	— — —	32	45	
— 17	—	5	0	0	— — —	33	20	
— 19	—	5	0	0	— — —	34	0	
— 22	—	5	0	0	— — —	36	15	
— 27	—	5	0	0	— — —	35	20	ad ort.
— 28	—	5	0	0	— — —	34	50	
— 29	—	4	0	0	— — —	34	30	
— 31	—	5	0	0	— — —	33	20	ad ort. bor.

April. 2	mane	4^h	30′	0″	♃ diſt. ab ω Ophiuchi	31′	35″	
— 6	—	4	30	0	— — —	29	40	
— 9	—	5	0	0	— — —	29	10	
— 12	—	5	0	0	— — —	31	20	
— 18	—	4	0	0	— — —	37	0	ad occ. bor.
— 20	—	4	0	0	— — —	51	12	
— 22	—	4	0	0	♃ ſtabat in linea quaſi recta inter ψ & ω Ophiuchi diſtans ab illa ad ortum 1° 11′ 15″, & ab hac ad occaſum 1° 2′ 45″.			
— 24	—	4	0	0	♃ diſtat a ψ 1° 5′ 0″, & ab ω 1° 11′ 0″, a linea recta paulo auſtralior.			

April.	28	mane	4^h	0′	0″	♃ diſt. a ſtel. ψ Oph.	47′	0″	ad ort.
—	30	—	4	0	0	— — —	39	40	ad occ.
Maji.	4	mane	4^h	0′	0″	♃ diſt. a ſtel. ψ Oph.	35′	10″	ad auſtr.
—	7	—	4	0	0	— — —	42	15	
—	25	veſp.	9	0	0	♃ diſt. a ſtel. ν ♏	41	0	ad auſtr.
—	26	—	8	30	0	— — —	40	35	
						& a ſtel. ω ♏ boreal. 1°	10	50	ad ort.
						& ab ω auſtraliore 1	16	10	ad ort.
Jun.	8	veſp.	8^h	0′	0″	♃ diſt. a β ♏	8′	30″	ad occ.
—	9	—	8	0	0	— —	13	50	
—	12	—	8	0	0	— —	31	35	
—	25	—	8	30	0	♃ diſtabat a ſtellis duabus λ ♏,			
						a boreal. quidem 0°	39′	40″	
						ab auſtral. autem 1	7	0	
—	29	—	9	0	0	♃ a λ ♏ bor. 22′ 10″ ab auſtr.	53	20.	
Jul.	3	veſp.	9^h	0′	0″	♃ a bor. 9′ 20″ ab auſtr.	44′	50″	
—	5	—	9	30	0	♃ a λ bor.	7	15	ad auſtrum.
						ab auſtr.	43	30	ad boream.
—	10	—	8	30	0	♃ a λ bor.	16	25	ad auſtr. occaſum.
						a λ auſtr.	39	40	ad boream.
—	16	—	8	30	0	♃ a λ bor.	27	20	ad occaſ.
						a λ auſtr.	40	30	ad boream.
—	19	—	10	0	0	a λ bor.	31	10	ad occaſ.
						a λ auſtr.	40	40	ad boream.

Jul. 27

Jul.	27	veſp.	8^h	0'	0" ♃	a λ bor.	33'	20"	ad occ. auſtr.
						a λ auſtr.	39	50	ad occ. bor.
—	30	—	8	0	0	a λ bor.	31	10	
						a λ auſtr.	38	20.	
Aug.	2	veſp.	8^h	0'	0" ♃	a λ bor.	27'	0"	ad occ. bor.
						a λ auſtr.	35	50	ad bor.
—	4	—	8	0	0	a λ bor.	24	20	
						a λ auſtr.	30	45	
—	10	—	8	0	0	a λ bor.	15	45	} quaſi in recta li-
						a λ auſtr.	34	10	} nea inter ambas.
—	17	—	8	0	0	a λ bor.	26	0	ad ortum.
						a λ auſtr.	44	50	ad ortum. bor.
—	18	—	8	0	0	a λ bor.	29	50	
						a λ auſtr.	48	15.	
Sept.	1	—	7^h	30'	0" ♃	diſtat a β ♏	50'	20"	ad occ. auſtr.
—	2	—	7	0	0	— —	44	50	
—	3	—	7	0	0	— —	39	50	
—	4	—	7	0	0	— —	35	10	
—	5	—	7	0	0	— —	30	30	
						& ab ω borea	55	0	ad boream.
—	8	—	7	0	0	a β —	26	40	ad auſtr.
						ab ω borea	31	20	
—	9	—	6	30	0	a β	28	10	hic latet error.
						ab ω borea	24	45	
—	10	—	6	30	0	a β	31	35	
						ab ω borea	20	30.	

Sept. 11 veſp.	6^h 30′ 0″	♃ diſtat a β ♏		36′	15″	
		ab ω bor.		18	45	
		ab auſtr.		31	0	
— 14 —	7 0 0	ab ω bor.		28	10	
		ab ω auſtr.		31	0	
— 16 —	8 0 0	a β	1°	10	50	ad ort.
		ab ω. bor.		41	0	
		ab ω auſtr.		40	0	
		a ν ♏	1	6	10	ad auſtr.

Oct. 18 veſp. 6^h 0′ 0″ ♃ diſt. ab ω Ophiuchi 10′ 0″ ad ort.

Anno 1723.

April. 22 mane ♃ ad duas ſtellulas ν in naſo Sagittarii (vide Zod. ſtell. Flamſt.) & 4^h 0′ 0″
a præcedente diſtans 22′ 10″ ad occ.
a ſequente 35 0 ad occ.

— 29 — 4^h 0′ 0″ ♃ diſt. a præced. 21′ 20″ ad occ.
a ſequent. 33 20 ad occ.
ſtellulæ diſt. 12 35.

Maji. 3 mane 4^h 30′ 0″ ♃ diſtat a præc. 24′ 30″
a ſeq. 36 40.

Anno 1724.

April.	17	mane	$4^h\ 30'\ 0''$	♃ diſt. a θ ♑		$33'$	$5''$	ad occ. bor.
—	19	—	4 30 0	—	—	19	40	
—	20	—	4 30 0	—	—	12	20	
—	21	—	4 30 0	—	—	6	50	
—	23	—	4 0 0	—	—	8	30	
—	24	—	4 0 0	—	—	14	55	ad ort.

Dec.	11	veſp.	$5^h\ 30'\ 0''$	♃ diſt. a θ ♑		$29'$	$50''$	ad ort.
—	13	—	5 30 0	—	—	51	40.	

Anno 1725.

April. 12 mane $4^h\ 0'\ 0''$ ♃ diſt. a λ ♒ $34'\ 20''$ ad auſtr.

Maji.	6	mane	$4^h\ 0'\ 0''$	♃ diſt. a φ ♒		$47'$	$30''$	ad occ.
—	8	—	4 0 0	—	—	27	5	
—	10	—	4 0 0	—	—	8	5	
—	11	—	4 0 0	—	—	1	11	ad ort.
—	12	—	4 0 0	—	—	10	10	
—	13	—	4 0 0	—	—	18	50.	

Jun. 23 mane $3^h\ 30'\ 0''$ Stabat ♃ inter 3 ſtellas notatas in Zod. ſtell. Flamſt. ſed anonymas hoc

ſitu * *b*

* *a* Porro

** ⊙ ♃

c *

						♃ diſtabat a ſt. *a*	32′	47″	ad ort.
						a - *b*	16	40	ad auſtr.
						a - *c*	25	50	ad bor.
Jun.	27	mane	4ʰ	0′	0″	♃ diſtat ab - *a*	18	50	circiter.
						a - *c*	15	0	circiter.
Jul.	3	mane	3	30	0	♃ diſtat a - *b*	24	45	ad ort. auſt.
						a - *c*	8	35	ad occ.
						Ferme in linea recta inter utramque			
—	8	—	4	0	0	♃ diſtat a - *b*	26′	30″	
						a - *c*	6	30.	

Sept.	3	veſp.	8ʰ	0′	0″	♃ diſt. a φ ♒	33′	40″	ad ort.
—	4	—	9	0	0	— —	29	45	ad occ. auſtr.
—	5	mane	4	30	0	— —	28	30	
—	—	veſp.	8	0	0	— —	27	25	
—	6	—	8	0	0	— —	27	15	ad auſtr.
—	7	mane	4	45	0	— —	28	0	
—	—	veſp.	7	30	0	— —	29	35	
—	9	mane	5	0	0	— —	36	30	
—	—	veſp.	7	0	0	— —	38	0	
—	20	—	9	0	0	♃ ad 3 ſtellas *h* in ♒ diſtans a borea 50′ 30″ ad ortum.			
—	22	—	9	0	0	♃ diſt. ab *h* borea	37′	20″	
—	24	—	7	0	0	— ab *h* borea	24	10	
						ab *h* auſtr.	32	15.	

Sept. 26 veſp.	$9^h\ 45'\ 0''$	♃ diſt. ab ♄ borea	12'	54"	
		a media	16	7	
		ab auſtr.	28	0	
		diſtat autem ♄ borea			
		ab auſtrina	17	5	
		a media	4	50	
— 28 —	8 0 0	♃ ferme in linea recta cum 3 ſtellis ♄ ad boream earundem			
		diſtans a borea	11	33	
		a media	15	35	
		ab auſtrina	28	30.	
— 29 —	8 0 0	♃ diſtat ab ♄ bor.	14	44	ad occ. b.
		a media	18	28	
		ab auſtr.	30	51.	

Dec. 8 veſp.	$6^h\ 30'\ 0''$	♃ rurſum ad 3 ſtellas ♄ ≈ diſtans		
		ab ♄ bor.	24'	45"
		ab auſtr.	41	25
— 9 —	7 15 0	♃ diſtat ab ♄ bor.	24	20
		ab auſtr.	40	30
		declinans modice ad ortum a recta cum illis linea.		
— 10 —	5 15 0	♃ diſt. ab ♄ borea	23	54
		ab auſtr.	41	0
— 11 —	7 15 0	♃ ab ♄ bor.	27	30
		ab auſt.	42	40.

Dec.	24	veſp.	$5^h\,30'\,0''$	♃ diſt. a φ ♒		$45'\,15''$	ad occ. auſtr.
—	25	—	5 30 0	—	—	36 15	
—	26	—	5 15 0	—	—	28 35	
—	27	—	5 15 0	—	—	20 45	ad auſtr.
—	28	—	5 15 0	—	—	13 12	
—	29	—	5 30 0	—	—	9 25	
—	30	—	5 30 0	—	—	13 5	
—	31	—	5 15 0	—	—	20 45.	

Anno 1726.

Jan. 4 veſp. $5^h\,45'\,0''$ ♃ ad duas ſtellulas, puta *n* & *i* in ♒ vide Zod. ſtell. Flamſt.

diſtabat ab *n* $39'\,40''$ ad auſtr.

ab *i* 36 0 ad occ.

— 5 — 5 30 0 ♃ diſtat ab *n* 34 35

ab *i* 27 45

— 7 — 5 30 0 ♃ diſtat ab *n* 27 55

ab *i* 20 5

ſtans in medio illarum modice ad ortum declinans a recta per eaſdem ducta unde earum diſtantia proxime $48'\,0''$.

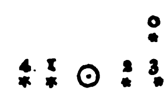
— 8 — 6 30 0 ♃ ab *n* $31'\,35''$

ab *i* 24 45

— 9 — 6 15 0 ♃ ab *n* 36 0

ab *i* 31 10.

Sept. 3 mane $5^h\,0'\,0''$ ♃ diſtabat a ſtella *o* in Lino ♓ $38'\,50''$ ad ort.

Sept.	4 mane	5h	0′	0″	♃ diſtab. a ſtel. ο in Lino ♓		35′ 10″	
—	5 —	5	0	0	— — —	31	35	
—	6 —	5	0	0	— — —	37	30	
—	7 veſp.	10	0	0	— — —	24	20	
—	8 mane	5	0	0	— — —	18	50	
—	9 veſp.	9	30	0	— — —	11	20	
—	10 mane	5	0	0	— — —	10	10	
—	— veſp.	10	30	0	— — —	7	40	
—	11 mane	5	0	0	— — —	6	0	
—	12 veſp.	8	45	0	— — —	5	50	
—	13 mane	5	0	0	— — —	6	25	
—	15 veſp.	9	0	0	— — —	20	15	ad occ.
—	16 mane	5	0	0	— — —	22	35	
—	— veſp.	9	45	0	— — —	26	15.	

Anno 1727.

Febr.	26 veſp.	6h	15′	0″	♃ diſt. ab ο ♓	34′	55″	ad ort. bor.
—	27 —	6	15	0	— —	40	30	dub.
—	28 —	6	0	0	— —	48	0.	

Mart. 1 veſp. 6h 15′ 0″ ♃ diſt. ab ο ♓ 57′ 10″.

Anno 1728.

Aug. 16 mane 4h 0′ 0″ ♃ diſtat ab ν ♊ 38′ 35″ ad occ.

Aug.	17	mane	4^h	0′	0″	♃ diſt. ab ν ♊		34′	20″	
—	18	—	3	30	0	—	—	32	10	
—	28	—	4	30	0	♃ diſt. a μ ♊		31	22	
—	29	—	4	30	0	—	—	29	25	ad bor.

Dec.	13	veſp.	8^h	0′	0″	♃ ab eadem μ ♊		54′	15″	
—	15	—	8	0	0	—	—	48	40	
—	16	—	9	0	0	—	—	44	0	ad bor.
—	18	—	8	0	0	—	—	38	24	
—	19	—	8	0	0	—	—	37	35	
—	22	—	8	0	0	—	—	44	10	ad occ.

Anno 1729.

Jan.	3	veſp.	5^h	30′	0″	♃ diſtat ab ν ♊		44′	35″	
—	4	—	5	30	0	—	—	46	30	
—	6	—	5	30	0	—	—	53	45.	

Jan.	20	veſp.	5^h	30′	0″	♃ diſt. a Propode ♊			25′	48″	
—	23	—	6	0	0	—	—	—	11	35	$\overset{4}{\cdot}\,\underset{2}{\cdot}\ \odot\ \underset{1}{\cdot}\ \underset{3}{\cdot}$
—	24	—	5	15	0	—	—	—	8	0	✱ Propus.
—	25	—	7	0	0	—	—	—	6	30	ad boream.
—	26	—	5	0	0	—	—	—	7	48	
—	27	—	5	30	0	—	—	—	11	40	ad occ.

Mart. 17

Mart.	17	veſp.	9^h	15′	0″	ab eadem		13′	15″	ad bor.
—	20	—	6	15	0	—	—	19	50.	

Oct.	4	mane	5^h	30′	0″	♃ diſt.	a δ ♋	21′	20″	ad bor.
—	9	—	5	45	0	—	—	33	40.	

Anno 1730.

Jan.	16	veſp.	7^h	30′	0″	♃ diſt.	a δ ♋	37′	32″	ad bor.

Maji.	27	veſp.	9^h	0′	0″	♃ diſt.	a δ ♋	53′	10″	ad bor.
—	29	—	8	0	0	—	—	41	25	
—	31	—	8	0	0	—	—	36	50.	

Jun.	1	veſp.	8^h	0′	0″	♃ diſt.	a δ ♋	38′	0″	ad ort.

Sept. 9 mane 4^h 30′ 0″ ♃ ſtabat recta ſupra Cor ♌ ſive Regulum α ♌ diſt. ab eodem 35′ 50″

—	10	—	5	0	0	♃ diſt.	a Regul.	—	26	30
—	13	—	5	30	0	—	—	—	26	40
—	14	—	5	15	0	—	—	—	36	5 ad ort.

Dec.	23	mane	6^h	30′	0″	♃ diſtat a β ♏		21′	30″	
—	24	—	6	15	0	♃ a β ♏		14	45	
						ab ω ♏ b.		51	40	
—	26	—	6	30	0	♃ a β		28	45	ad auſtr.
						& ab ω boreal.		38	15	ad bor.
—	27	—	6	30	0	♃ a β		38	30	
						& ab ω boreal.		37	10	
—	28	—	6	30	0	♃ diſtat a β ♏		52	5	
						& ab ω boreal.		39	50	
						& a ν ♏	1°	13	0	
—	29	—	6	15	0	♃ a β	1	3	0	
						ab ω	0	43	0	
						a ν	1	6	50	
—	30	—	6	30	0	♃ diſtat ab ambabus ſtellis ω æqualiter				
						ſcilicet	0°	55′	15″	
						a ſtella aut. ν	0	59	40	
—	31	—	6	30	0	♃ diſt. ab ω bor.	1	1	30	
						a ſtella ν	0	53	15	
						β ♏ diſt. ab ω bor.	0	59	50.	

Anno 1734.

Jan.	16	mane	6^h	30′	0″	♃ diſt. a ψ Oph.	46′	50″	ad auſtr.
—	17	—	6	30	0	— —	47	10	
—	18	—	6	30	0	— —	51	0	
—	26	—	6	30	0	♃ diſt. ab ω Oph.	34	25	ad occ. bor.
—	28	—	6	30	0	— —	22	0	ad bor.

Febr. 2 mane 6^h 0′ 0″ ♃ diſt. ab ω Ophiuchi 42′ 10″.

Sept.	24	veſp.	7^h	$45'$	$0''$	♃ ab eadem ω Oph.	$22'$	$40''$	ad occ.
—	25	—	7	15	0	— — —	13	10	
—	26	—	7	0	0	— — —	5	0	
—	27	—	6	30	0	— — —	4	10	ad ort.
—	28	—	6	15	0	— — —	12	30	
						numeratum item intervallum temporis bis & ter a ſtella ad ♃ erat $50''$			
—	29	—	7	0	0	♃ ab ω —	$23'$	$10''$.	

Anno 1735.

Mart.	6	mane	5^h	$30'$	$0''$	♃ ad 2 ſtellulas ν in naſo Sagittarii, a quarum occidentaliore ſeu præcedente diſtabat $15'$ $25''$ ad occ.			
—	7	—	6	0	0	numeratum tempus a tranſitu ♃ per horarium ad tranſitum ſtellæ per eundem, eratque			
						♃ occidental. ſtel. ν præc.	$0'$	$29''$	pend.
						& ſtel. ν ſeq.	1	22.	Hæc decurrit eundem quaſi parallelum, quem decurrerat ♃.
—	8	—	5	45	0	♃ oriental. ſtel. ν præc.	$0'$	$10''$	pend.
						& borealior eadem	3	24	circ.
						diſtansque ab ea	4	13	
						♃ item occidental. ν ſeq.	0	45	pend.
						eaque auſtralior.	0	28	circ.
						diſtans ab eadem	11	16	
—	9	—	5	50	0	♃ oriental. ſtel. ν præc.	0	49	pend.
						eaque borealior	3	20	circ.

						diſtans ab eadem	12′	40″.	
						occidentalior ν ſequente	0	7	pend.
						eaque auſtralior	0	30	circ.
						diſtans ab eadem	1	49.	
Mart.	10	mane	5^h	50′	0″	♃ orientalior ſtella ν ſeq.	0	28	pend.
						borealior quantum ferme heri.			
—	24	—	5	15	0	♃ diſtat ab ο ♐	50′	20″	ad occ. auſtr.
—	26	—	5	15	0	— —	43	30	
—	28	—	5	15	0	— —	48	45	ad auſtr.

Anno 1736.

Mart.	25	mane	5^h	30′	0″	♃ occidentalior ſtella ϑ ♑	0′	33″	pend.
						eaque borealior	3	25	circ.
						diſtans ab eadem	8	55	
—	26	—	5	30	0	♃ orientalior ſtella	0	9	pend.
						borealior	6	10	
						diſtans ab illa	6	30.	

Nov.	11	veſp.	5^h	41′	30″	♃ occidental. ſtella ϑ ♑	0′	28″	pend.
						eaque auſtralior	23	12	circ.
						diſtans ab eadem	23	55	
—	13	—	5	34	30	♃ orientalior ſtella ϑ ♑	0	32	pend.
						diſtans ab eadem	20	30	
—	14	—	5	30	0	♃ orientalior eadem	1	4	pend.
						auſtralior	17	5	circ.
						diſtans ab illa	22	30.	

Dec.	7	veſp.	$5^h\ 0'\ 0''$	♃ occidentalior ſtella ι ♑	1′	10″	pend.
				eaque borealior	25	15	circuli.
				diſtans ab eadem	30	0	
—	8	—	5 0 0	♃ occidentalior eadem	0	30	
				borealior	28	0	
				diſtans ab ea	28	40	
—	9	—	5 0 0	♃ orientalior eadem	0	24	
				borealior	30	45	
				diſtans ab ea	31	25.	

Anno 1737.

April.	20	mane	$5^h\ 0'\ 0''$	♃ orientalior ſtella φ ♒	0′	58″	pend.
				borealior eadem	12	18	circuli.
				& diſtans ab illa	17	4.	

Jun.	13	mane	$4^h\ 0'\ 0''$	♃ ad ſtellam in Trapezio caudæ Ceti borealiorem præcedentem apud Hevelium, & hodie			
				♃ occidentalior ſtella	1′	48″	pend.
				auſtralior eadem	1	40	circuli.
				diſtans ab illa proxime	26	0	
—	14	—	4 0 0	♃ occidentalior ſtella	1	21	
				in eodem parallelo	0	0	circuli.
				diſtans ab illa	20	20	
—	15	—	4 0 0	occidentalior ſtella	1	3	pend.
				borealior eadem	2	0	circuli.
				diſtans ab illa	15	45.	

Jun.	16	mane	4^h	$0'$	$0''$	♃ occidentalior ſtella	$0'$	$40''$	pend.
						borealior eadem	4	6	
						diſtans ab illa	10	35.	
Oct.	23	veſp.	5^h	$30'$	$0''$	♃ ad ſtellam φ ♒ & hodie			
						♃ oriental. ſtel. φ ♒	$2'$	$52''$	penduli.
						eaque auſtralior	12	15	circuli.
						diſtans ab eadem	45	0	proxime.
—	24	—	5	45	0	♃ orientalior φ ♒	2	44	
						auſtralior	13	40	
						diſtans	41	0	
—	25	—	5	45	0	♃ orientalior φ ♒	2	32	
						auſtralior	14	20	
						diſtans	39	15	
—	26	—	5	45	0	♃ orientalior φ ♒	2	21	
						auſtralior	15	20	
						diſtans	37	13	
—	28	—	5	45	0	♃ orientalior φ ♒	1	55	
						auſtralior	16	24	
						diſtans	33	48	
—	29	—	5	30	0	♃ orientalior φ ♒	1	47	
						auſtralior	17	45	
						diſtans	32	6	
—	30	—	5	30	0	♃ orientalior φ ♒	1	39	
						auſtralior	18	6	
						diſtans	31	0	
—	31	—	5	30	0	♃ orientalior φ ♒	1	32	
						auſtralior	18	48	
						diſtans	30	3.	

Nov. 2

Nov.	2	veſp.	5^h	30′	0″	♃ culminav. poſt φ ♒	1′	28″	
						auſtralior	19	10	
						diſtans	27	40	
—	3	—	5	30	0	♃ orientalior	1	25	
						auſtralior	19	20	
						diſtans	27	15	
—	5	—	5	30	0	♃ orientalior	1	19	
						auſtralior	19	40	
						diſtans	26	18	
—	7	—	5	30	0	♃ orientalior	1	7	
						auſtralior	19	38	
						diſtans	25	37	
—	8	—	5	30	0	♃ orientalior φ ♒	1	12	penduli.
						auſtralior eadem	19′	30	circuli.
						diſtans ab illa	25	30	
—	9	—	5	30	0	♃ orientalior	1	15	
						auſtralior	19	10	
						diſtans	25	24	
—	10	—	5	30	0	♃ orientalior	1	16	
						auſtralior	18	50	
						diſtans	25	16	
—	12	—	5	15	0	♃ orientalior	1	12	
						auſtralior	18	30	
						diſtans	25	0	
—	13	—	5	15	0	♃ orientalior	1	15	
						auſtralior	18	20	
						diſtans	24	55	
—	16	—	5	30	0	♃ orientalior	1	20	
						auſtralior	15	0	
						diſtans	25	30.	

Nov. 21	veſp.	$5^h\ 15'\ 0''$	♃ orientalior φ ♒	2′	6″
			auſtralior	9	55
			diſtans	32	5
— 23	—	5 15 0	♃ orientalior	2	25
			auſtralior	7	10
			diſtans	35	50.

Dec. 7 veſp. $5^h\ 15'\ 0''$ ♃ in recta linea inter ſtellas *n* & *i* in ♒ (vide Zod. ſtell. Flamſtedii) diſtans a ſtella *i* 13′ 30″ ad bor.

Anno 1738. vacat

Anno 1739.

Nov. 17 mane $6^h\ 30'\ 0''$ ſtella ω orientalior in ♉ erat in eadem aſcenſione recta cum limbo ♃^{is} occidentaliore diſtans ab hujus centro ad boream 12′ 25″.

Anno 1740.

Jul. 18	mane	$4^h\ 0'\ 0''$	♃ orientaL Propode ♊	0′ 34″	pend.
			eaque auſtralior	6 25	circuli.
			diſtans ab eadem	10 30.	
			Obſerv. ter repetita.		

Jul. 19 mane 4^h 0′ 0″ ♃ orientalior eadem 1′ 30″
auſtralior 5 30
diſtans 22 50.

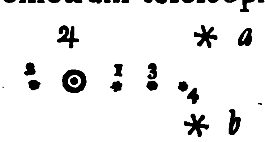
Aug. 7 mane 4^h 30′ 0″ ♃ diſtat a ſtella μ ♊ 34′ 50″ ad bor.
— 8 — 4 0 0 — — — 37. 10.
Quaſi in eadem aſc. recta.

Anno 1741.

Jan. 28 veſp. 6^h 0′ 0″ ſtabat ♃ ſupra ſtellam μ in calce pedis dextri Caſtoris, quaſi uno gradu ad boream, ad ortum duarum ſtellularum, quas hic voco *a* & *b*,

orientalior ſtella *a* 0′ 34″ penduli.
& auſtralior eadem 4 45 circuli.
orientalior ſtella *b* 0 35
& borealior eadem 2 40.

Obſervatione ſæpius iterata colluſtrante Luna micrometrum teleſcopii



Numerata item ſecunda penduli
a 2do Satell. ad ♃ 0′ 16″
a ♃ ad 1^{mum} Satell. 0 9
a 1mo Satell. ad 3^{tium} 0 13
a 3^{tio} ad 4^{tum} 0 14.

Anno 1742. & 1743. vacant

Anno 1744.

April. 16 veſp. 10ʰ 49′ culminat ♃ altus 48° 47′ eodem momento culminat γ ♍ alta 50° 5′.

§. III.

MARS CUM FIXIS.

Anno 1719.

Jan. 14 mane 6ʰ 0′ 0″ ſtabat ♂ ad ſtellam λ, quam Bayerus ponit in ♎, Hevelius in ♏, in Zod. ſtell. Flamſt. ponitur ad roſtrum ♏ cum parvula ſocia ad boream.
♂ diſt. a ſtella λ 29′ 0″ ad ort.
a ſocia borea 25 0 ad auſtr.
— 20 — 6 0 0 ♂ diſt. ab ω ♏ auſtrina 49′ 0″ ad ort.
ab ω ♏ borea 51 0 circiter.

Maji. 24	mane	4ʰ	0′	0″	♂ diſt. a γ ♑		17′	30″	ad occ.
— 25	—	4	0	0	—	—	15	20	ad ort.
— 26	—	3	45	0	—	—	46	0	circiter.

Maji. 27 mane 4^h 0′ 0″ ♂ diſt. a δ ♑ 25′ 20″ ad occ.
— 28 — 4 0 0 — — 7 30 ad ort.

Jul. 2 mane — — ♂ culminat poſt ξ Pegaſi 5′ 0″ circit.
& ante ſtellam τ ♒ 1 0 circit.
diſtans ab iſta 59 30 ad bor.
— 3 — — — ♂ culminat ferme ſimul
cum τ ♒ diſtans ab ea 59 30 ad bor.

Aug. 25 mane 0^h 22′ 10″ ♂ culminat una cum μ Pegaſi
diſtans a τ ♒ ferme 58′ 0″
— 27 — 0 15 0 ♂ culminat poſt τ ♒ 0 15
ab eadem diſtans 58 0 ad auſtr.

Anno 1720.

Jan. 13 veſp. 5^h 30′ 0″ ♂ diſt. a ζ in Lino ♓ 34′ 10″ ad occ. b.
— — — 7 15 0 ſtabat in recta linea cum
hac & ſocia auſtrina,
quæ diſtat a ſtella ζ 36 50
— 14 — 5 15 0 ♂ diſt. ζ in Lino ♓ 45 50
— 15 — 5 30 0 — — — 1° 11 0 ad ort.

Mart. 1 veſp. 7^h 0′ 0″ ♂ diſt. a δ ♈ 1° 5′ 15″ ad occ. auſtr.
— 2 — 6 15 0 — — 0 48 50 ad auſtr.
— 3 — 6 45 0 — — 0 56 10 ad ort. auſtr.

Mart.	4	veſp.	6^h	15′	0″	♂ diſt. a δ ♈	1°	19′	45″	ad ortum.
	7	—	7	30	0	♂ diſt. ab ultima in cauda ♈ auſtr. vide Hevel.	1	4	0	ad auſtr.
—	22	—	8	0	0	♂ diſt. ab A ♉ faciens cum hac & ſocia hujus triangulum iſoſcelium		11	0	ad auſtr. * A / * * ♂
—	31	—	7	45′	0	♂ prætergreſſus jam ad ort. ſtell. κ & υ in ♉ diſtab. hodie a κ borea	1°	6′	40″	
						a κ auſtr.	1	9	10	
						a υ occidental.	0	42	45	
						a υ orientaliore	0	28	45.	
April.	5	veſp.	7^h	0′	0″	♂ diſt. a τ ♉		31′	0″	ad ort. bor.
—	6	—	7	0	0	— —		56	30	ad ort.
—	14	—	8	0	0	♂ diſt. a parva ſtella media inter cornua ♉		9	0	ad auſtr.
—	15	—	8	0	0	♂ diſt. ab eadem		33	0	ad ort. auſtr.
—	23	—	8	0	0	ſtabat ♂ quaſi in linea recta & medius inter cornu utrumque ♉, habebatque duas alias ſtellulas vicinas, unam ad boream, a qua				
—	—	—	7	45	0	diſtabat ferme		59′	0″	
						alteram ab auſtr. a qua diſt.		44	20.	

Hevelius borealiorem vocat extremam pedis Aurigæ; Bayerus utramque ponit in conſtellatione ♉; hic boream voco *b*. auſtrinam *a*.

April. 24	veſp.	8ʰ	0′	0″	♂ diſt. a b. —	1°	26′	30″
					ab a. —	0	31	10
— 25	—	8	15	0	— ab a. —	0	53	0
					ab alia ſequente borea, Hevelio ſub pede Aurigæ informium 1ᵐᵃ	1°	15′	0″ ad occ. a.
— 26	—	8	0	0	— ab heſterna			
					priore	1	24	30
					a poſteriore	1	19	0
— 28	—	8	0	0	— a ſecunda informium ſub pede Aurigæ		35	0.

Maji. 18	veſp.	8ʰ	0′	0″	♂ diſt. ab ε ♊	0°	49′	30″	ad occ.
					ab ω ♊	1	20	30	ad occ.

Nov. 16	mane	6ʰ	0′	0″	♂ diſt. a χ ♍	1°	2′	45″	ad occ.
— 17	—	6	0	0	— —	0	23	0	
— 18	—	6	0	0	— —	0	16	10	ad ort.
— 28	—	6	15	0	♂ diſt. ab α ♎	1	5	30	ad occ.
— 29	—	6	15	0	— —	0	26	10	
— 30	—	6	15	0	— —	0	14	5	ad ort.

Dec.	15	mane	6ʰ	15′	0″	♂ diſt.	a κ ♎		0°	48′	15″	ad bor.
—	21	—	6	15	0	—	a λ ♎ v. ♏		0	48	10	ad occ.
—	25	—	6	30	0	—	a β ♏		1	6	30	ad occ.
—	27	—	6	15	0	—	—		1	1	0	ad auſtr.
							ab ω ♏ bor.		0	8	10	
							ab ω ♏ auſt.		0	6	40	

inter quas tranſierat, diſtantia duarum ω 14′ 30″.

Mars Æ 241°.25′ Stella Æ 241°.57′
♈ — 20.18. ♈ — 19.21

Anno 1721.

Jan. 1 mane 6ʰ 15′ 0″ ♂ diſtat a ψ Ophiuchi 1° 25′ 0″ ad occ. auſt.

April. 10 mane 5ʰ 0′ 0″ ♂ diſtat a ι ♐ 17′ 45″ ad ort.

Anno 1722.

Jan.	21	veſp.	5ʰ	30′	0″	♂ diſt.	a δ ♈	59′	30″	ad occaſ.
—	22	—	7	45	0	—	—	34	10	
—	23	—	5	30	0	—	—	13	40	ad occ. auſtr.
—	—	—	8	0	0	—	—	12	0	
—	24	—	5	15	0	—	—	9	50	ad ort.
—	—	—	8	30	0	—	—	12	40	
Eadem nocte						tum culminante Procyone diſt. erat		15	20	
—	25	—	5	30	0	♂ diſt.	a δ ♈	33	30	ad ort.

cul-

culminavitque ♂ poſt hanc ſtellam δ 3″ pend. altus 68° 4′.

Jan. 25 veſp.	9h	30′	0″	♂ diſt. a δ	0°	37′	30″	
				a ζ vicina	1	10	20	ad auſtr.
— 26 —	5	30	0	— a δ —	0	59	30	ad ort.
				a ζ —	1	3	15	ad auſtr.
— 27 —	5	45	0	— a ζ —	1	6	30	
— 28 —	5	45	0	— a τ in cauda ♈		59′	20″	ad occ.
				ab ult. in caud.		56	20	ad occ.
— 29 —	6	0	0	— a τ —		48	40	ad occ. a.
				ab ult. caud.		34	40	ad occ.
— 30 —	6	0	0	— a τ —		48	15	ad auſt.
				ab ultima		20	30	ad auſt.
Febr. 1 veſp.	8h	0′	0″	♂ diſt. ab ultima caud.	0°	53′	0″	ad ort.
— 20 —	6	0	0	— ab A ♉	0	31	10	ad bor.
				a ſocia ſeq.	0	35	50	
				porro A a ſoc.	0	9	10	
— 21 —	6	0	0	— æqualiter ab A	0	45	15	} ad ort.
				& ſocia	0	45	15	} auſtrin.
— 22 —	6	0	0	— ab A	1	10	25	ad ort.
Mart. 7 veſp.	6h	30′	0″	♂ diſt. a τ ♉	1°	15′	30″	ad occ. bor.
— 8 —	8	30	0	— —	1	0	35	ad bor.
— 9 —	6	30	0	— —	1	4	50	
— 10 —	6	30	0	— —	1	17	0	ad ort.

April.	25	veſp.	8^h	30′	0″	♂ diſt. ab ε ♊	56′	20″	ad occ.
—	26	—	8	30	0	— —	31	20	ad occ. auſtr.
—	27	—	8	30	0	♂ diſt. jam poſt ☌	30′	30″	ad auſtr.
—	28	—	8	0	0	— — —	55	30	ad ort. auſtr.

Jun.	7	veſp.	8^h	30′	0″	♂ diſt. ab η ♋ circit.	43′	0″	ad occ.
—	8	—	8	0	0	— — —	13	15	
—	9	—	8	0	0	— — —	32	50	ad auſtr.

Anno 1723.

Mart. 18 mane 5^h 30′ 0″ ♂ diſt. a ι ♑ 49′ 0″ ad ortum.

Dec.	1	veſp.	10^h	0′	0″	♂ diſt. ab ε ♊	40′	10″	ad ort bor.
—	3	—	6	30	0	— —	30	55	ad bor.
—	4	—	6	30	0	— —	32	10	
—	5	—	9	0	0	— —	48	40.	

Anno 1724.

Mart.	24	veſp.	7^h	0′	0′	♂ diſt. ab ε ♊		42′	0″	ad occ. bor.
—	28	—	8	0	0	— —	1°	5	0	ad ort.

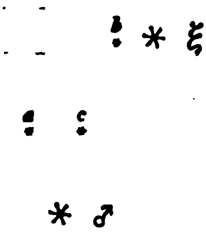
Jun.	27	veſp.	8^h	15′	0″	♂ diſt. a Reg. α ♌	0°	40′	30″	ad bor.
—	29	—	8	15	0	— — —	1	20	30	ad ort. b.

Anno 1725.

Aug. 28 mane 4^h 45′ 0″ ♂ diſt. a calce Caſtoris 1° 10′ 0″ ad bor.

Oct. 24 mane 6^h 0′ 0″ ♂ diſt. ab ν ♋ 13′ 0″ ad auſtr.
— 26 — 6 0 0 — — 59 40 ad ort.

Anno 1726.



Jan. 17 veſp. 8^h 0′ 0″ ♂ ad 4 parvas ſtellas, quarum præcedens & clarior videtur eſſe ξ, in ♋ erat autem in tubo hic ſitus.

						Porro ♂ diſtab. a ξ		1°	4′	50″	ad au.
						a *b*		1	1	40	ad au.
						ab *a*		0	57	25	ad occ.
						ξ a *b*		0	14	46	
						ξ a *c*		0	27	7	
						b a *c*		0	19	36	
						ξ ab *a*		1	0	48	
—	18 mane	5	30	0	diſt. ♂	a ξ	—	1	1	40	
						a *b*	—	1	0	35	
						ab *a*	—	1	1	0	
—	— veſp.	8	30	0	—	a ξ	—	0	57	10	
						a *b*	—	0	58	30	
—	20 —	7	30	0	—	a ξ	—	1	7	0	
						a *b*	—	1	16	45.	

Febr. 13 veſp. 6^h 15′ 0″ ♂ ad 2 ſtellas υ in ♋
diſtans ab ortiva 49′ 30″ } ad auſtr.
ab occidua 34 35 }
— 23 — — — a λ ♋ 23 40 ad auſtr.
a ſocia præc. 22 35 ad auſtr.

Anno 1727.

Dec.	21	mane	7^h	0′	0″	♂ diſt. a σ ♌		1°	3′	35″	ad bor.
—	22	—	7	0	0	—	—	1	0	24	
—	23	—	7	0	0	—	—	1	2	44	
—	24	—	7	0	0	—	—	1	7	44.	

Anno 1728.

Maji.	25	veſp.	9^h	0′	0″	♂ diſt. a χ ♌		41′	0″	ad occ.
—	26	—	9	0	0	—	—	20	0	
—	27	—	8	0	0	—	—	10	0	ad auſtr.
—	28	—	8	0	0	—	—	30	20	ad ort.

Jun.	22	veſp.	8^h	30′	0″	♂ diſt. a β ♍		40′	15″	ad occ.
—	23	—	8	30	0	—	—	13	15	
—	24	—	8	0	0	—	—	21	5	ad ort. auſtr.
—	25	—	8	0	0	—	—	50	10	ad ortum.

Nov.	2	veſp.	5^h	30′	0″	♂ diſt. a B Ophiuchi			12′	50″	ad auſtr.
—	3	—	5	0	0	—	—	—	35	10	ad ort.

Anno 1729.

Aug. 24 mane $4^h\ 30'\ 0''$ ♂ diſt. a μ ♋ $29'\ 15''$ ad ort. auſtr.

Sept. 1 mane $4^h\ 30'\ 0''$ ♂ diſt. ab η ♋ $45'\ 40''$ ad occ. auſtr.
— 2 — 4 30 0 — — 35 50.

Nov. 5 mane $6^h\ 0'\ 0''$ ♂ diſt. a χ ♌ $26'\ 50''$ ad bor.
— 6 — 6 0 0 — — 20 0
— 7 — 6 0 0 — — 46 20 ad ort.
— 12 — 6 30 0 ♂ diſt. a σ ♌ 34 35 ad occ.
— 14 — 6 30 0 — — 29 50 ad ort.

Dec. 26 mane $7^h\ 0'\ 0''$ ♂ diſt. a γ ♍ $0°\ 50'\ 20''$ ad auſtr.
— 27 — 7 0 0 — — 1 9 0.

Anno 1730.

Mart. 24 mane $5^h\ 0'\ 0''$ ♂ diſt. a *l* ♍ $20'\ 30''$ ad auſtr.
— 26 veſp. 9 0 0 — — 32 25 ad occ. auſtr.

April. 3 mane $0^h\ 19'\ 0''$ culminat ♂ altus $45°\ 57'\ 0''$
— — — 0 24 0 culminat ſpica ♍ alt. 40 25 0
— — — 0 5 0 differentia aſcenſionis,
differentia declination. 5 32 0.

April.	5	mane	0h	10′	0″	culminat ♂ altus	46°	7′	0″	
—	—	—	0	16	0	culm. ſpica ♍ alta	40	19	0	
—	—	—	0	6	0	diff. aſc. & diff. decl.	5	48	0	
—	8	veſp.	7	30	0	♂ diſt. a θ ♍	0	43	30	ad b.

Aug.	25	veſp.	7h	30′	0″	♂ diſt. a ι ♏	56′	20″	ad occ.

Oct.	8	veſp.	6h	30′	0″	♂ inter 2 ſtellas in pede ſiniſtro Ophiuchi			
						diſtans a propiore	31′	35″	
—	9	—	6	30	0	♂ diſt. ab heſterna	28	35	ad ortum.
						a θ Ophiuchi	40	20	ad occ.
—	10	—	6	30	0	— a θ Ophiuchi	17	30	ad bor.
						& a ſequente bor. 1°	1	0	ad auſtr.
—	11	—	6	30	0	♂ diſt. a θ Ophiuchi	49	5	
						& a ſequente borea	36	40.	

Dec.	22	veſp.	7h	0′	0″	♂ diſt. a ι ♑	40′	20″	ad occ.
—	23	—	5	30	0	— —	9	0	ad bor.

Anno 1731.

Jan.	2	veſp.	5h	30′	0″	♂ oriental. ſtell. μ ♑	0′	8″	penduli,
						eademque auſtralior	30	30	
—	3	—	6	0	0	♂ orientalior ✱ᵃ μ ♑	2	30	
						diſtans ab ea	41	0	ad ort.
—	30	—	5	0	0	♂ diſt. a φ ♒	17	0	ad ort. b.

Nov.	5	mane	6^{h}	$0'$	$0''$	♂ diſt. a β ♍	$42'$	$40''$	ad bor.
—	17	—	6	0	0	♂ diſt. ab ν ♍	9	30	ad occ.
						& a ſocia	18	45.	

Anno 1732.

Mart.	12	mane	5^{h}	$45'$	$0''$	♂ diſt. a β ♏	$39'$	$0''$	ad ort.
						— a ν ♏	58	15	ad occ.
—	13	—	5	45	0	— a β ♏	58	55	
						— a ν ♏	42	10	
—	14	—	5	45	0	— a ν ♏	31	45	ad auſtr.
—	23	—	5	30	0	— a ψ Oph.	49	50	ad occ. auſtr.
—	24	—	5	30	0	— —	40	48	
—	25	—	5	30	0	— —	35	50	ad auſtr.
—	26	—	5	30	0	— —	36	16.	

April.	8	mane	5^{h}	$0'$	$0''$	♂ diſt. ab ω Ophiuchi	0°	$14'$	$15''$	ad b.
—	10	—	3	5	0	♂ culminat altus	29	22	0	
—	—	—	5	0	0	diſtat ab ω Oph.	0	15	50	ad or. b.
—	11	—	3	1	0	culm. alt.	29	20	0	
—	—	—	5	0	0	♂ diſt. ab ω	0	17	0	
—	13	—	2	54	0	♂ culm. alt.	29	16	0	
						♂ diſtans ab ω	0	20	24	ad ort.
—	15	—	5	0	0	♂ diſt. ab ω	0	21	14.	
—	16	—	4	45	0	♂ diſt. ab ω Oph.	0	21	48	
—	17	—	2	39	0	♂ culm. alt.	29	9	0	
—	—	—	5	0	0	♂ diſt. ab ω Oph.	0	21	52	ad ort.
—	18	—	2	35	0	♂ culm. alt.	29	7	0.	

April.	18	mane	5^h	0′	0″	♂ diſt. ab ω	0°	20′	58″	
—	19	—	2	31	0	culm. alt.	29	3	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	19	30	
—	20	—	2	27	0	♂ culm. alt.	29	0	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	18	0	
—	23	—	2	15	0	♂ culm. alt.	28	56	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	17	0	ad auſt.
—	24	—	2	11	0	♂ culm. alt.	28	54	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	20	10	
—	25	—	2	7	0	♂ culm. alt.	28	52	0	
—	—	—	4	15	0	♂ diſt. ab ω	0	25	25	
—	26	—	2	2	0	♂ culm. alt.	28	50	0	
—	—	—	4	15	0	♂ diſt. ab ω	0	32	10.	

Maji.	8	mane	1^h	1′	32″	♂ culm. altus	28°	54′	0″
—	—	—	1	10	47	Cor ♏ α culm. alt.	24	22	0
—	21	veſp.	8	30	0	♂ diſt. a δ ♏	0	51	10.

Aug. 14 veſp. 7^h 45′ 0″ ♂ diſt. a σ ♏ 1° 11′ 0″ ad bor.
& a ſocia borea 1 5 0 ad auſtr.
paulo declinans a recta linea inter eas.

Sept. 7 veſp. 7^h 15′ 0″ ♂ diſt. a θ Ophiuchi 1° 12′ 0″
ab A Oph. luc. 1 2 0
paulo declinans ad occaſum a recta linea inter eas.

Oct. 2

Oct.	2	veſp.	8^h	$0'$	$0''$	♂ diſt. a λ ♐		$23'$	$35''$.		

Nov.	23	veſp.	8^h	$0'$	$0''$	♂ diſt. a ϑ ♑	$0°$	$58'$	$0''$	ad auſtr.
—	24	—	8	0	0	— —	1	15	0	ad ort. auſtr.
—	28	—	8	0	0	— a ι ♑	0	5	0	ad auſtr.
—	29	—	6	30	0	— —	0	40	48	ad ort.

Dec.	21	veſp.	5^h	$30'$	$0''$	♂ diſt. a σ ♒	$32'$	$5''$	ad occ.
—	22	—	5	30	0	— —	18	10	ad ort. bor.

Anno 1733.

Jan.	6	veſp.	6^h	$0'$	$0''$	♂ diſt. a φ ♒	$21'$	$50''$	ad occ.
—	7	—	5	30	0	— —	36	10	ad ort. bor.

Febr.	19	veſp.	7^h	$30'$	$0''$	♂ diſt. a ζ in Lino ♓	$19'$	$30''$	ad occ. b.
—	20	—	6	30	0	— — —	23	30	ad ort. b.

Oct.	1	mane	5^h	$30'$	$0''$	♂ diſt. a σ ♌	$0°$	$33'$	$5''$	ad auſtr.
—	3	—	5	45	0	— —	1	11	0	ad ort.
—	27	—	6	0	0	♂ diſt. ab η ♍	0	15	10	ad auſtr.
						a ſocia	0	22	30	ad ort.
—	28	—	6	0	0	♂ diſt. ab η ♍	0	48	55	ad ort.

April.	18	mane	5^h	0′	0″	♂ diſt. ab ω	0°	20′	58″	
—	19	—	2	31	0	culm. alt.	29	3	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	19	30	
—	20	—	2	27	0	♂ culm. alt.	29	0	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	18	0	
—	23	—	2	15	0	♂ culm. alt.	28	56	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	17	0	ad auſt.
—	24	—	2	11	0	♂ culm. alt.	28	54	0	
—	—	—	4	45	0	♂ diſt. ab ω	0	20	10	
—	25	—	2	7	0	♂ culm. alt.	28	52	0	
—	—	—	4	15	0	♂ diſt. ab ω	0	25	25	
—	26	—	2	2	0	♂ culm. alt.	28	50	0	
—	—	—	4	15	0	♂ diſt. ab ω	0	32	10.	

Maji.	8	mane	1^h	1′	32″	♂ culm. altus	28°	54′	0″
—	—	—	1	10	47	Cor ♏ α culm. alt.	24	22	0
—	21	veſp.	8	30	0	♂ diſt. a δ ♏	0	51	10.

Aug. 14 veſp. 7^h 45′ 0″ ♂ diſt. a σ ♏ 1° 11′ 0″ ad bor.
& a ſocia borea 15 0 ad auſtr.
paulo declinans a recta linea inter eas.

Sept. 7 veſp. 7^h 15′ 0″ ♂ diſt. a θ Ophiuchi 1° 12′ 0″
ab A Oph. luc. 1 2 0
paulo declinans ad occaſum a recta linea inter eas.

Oct. 2

Oct. 2 veſp. 8^h 0′ 0″ ♂ diſt. a λ ♐ 23′ 35″.

Nov.	23	veſp.	8^h	0′	0″ ♂	diſt. a ϑ ♑	0°	58′	0″	ad auſtr.
—	24	—	8	0	0	—	—	1	15	0	ad ort. auſtr.
—	28	—	8	0	0	—	a ι ♑	0	5	0	ad auſtr.
—	29	—	6	30	0	—	—	0	40	48	ad ort.

Dec.	21	veſp.	5^h	30′	0″ ♂	diſt. a σ ♒	32′	5″	ad occ.
—	22	—	5	30	0	—	—	18	10	ad ort. bor.

Anno 1733.

Jan.	6	veſp.	6^h	0′	0″ ♂	diſt. a φ ♒	21′	50″	ad occ.
—	7	—	5	30	0	—	—	36	10	ad ort. bor.

Febr.	19	veſp.	7^h	30′	0″ ♂	diſt. a ζ in Lino ♓	19′	30″	ad occ. b.
—	20	—	6	30	0	—	—	—	23	30	ad ort. b.

Oct.	1	mane	5^h	30′	0″ ♂	diſt. a σ ♌	0°	33′	5″	ad auſtr.
—	3	—	5	45	0	—	—	1	11	0	ad ort.
—	27	—	6	0	0	♂ diſt. ab η ♍	0	15	10	ad auſtr.
						a ſocia	0	22	30	ad ort.
—	28	—	6	0	0	♂ diſt. ab η ♍	0	48	55	ad ort.

Dec. 29 mane	6ʰ	30′	0″	♂ diſt. ab α ♎	0° 40′	45″	ad b.
— 30 —	6	30	0	— — tantund.	0 40	45	
— 31 —	6	30	0	— — —	1 2	10.	

Anno 1734.

Jan. 17 mane	6ʰ	30′	0″	♂ diſt. a κ ♎	43′	10″	ad bor.
— 18 —	6	30	0	— — —	35	5	
— 19 —	6	30	0	— — —	44	10	
				a ſoc. præc.	48	40	
— 23 —	6	30	0	♂ diſt. a λ ♎ vel ♏	39	40	ad bor.
				a ſocia	26	0	ad occ.
— 24 —	6	30	0	— a λ —	45	20	ad ort. bor.
				a ſocia	19	15	ad ort.
— 27 —	6	30	0	♂ diſt. a β ♏	34	0	ad occ.
— 28 —	6	30	0	— —	24	15	ad auſtr.
				ab ω ♏ borea	30	30	ad bor.
— — —	7	9	0	circ. culm. ♂ poſt β ♏		25	penduli.
				altus 30°	41	0.	

Febr. 7 mane	6ʰ	0′	0″	♂ diſt. ab ω in calce Oph.	8′	10″	ad bor.
— 8 —	6	15	0	— — — —	30	45	ad ort.

April. 4 mane	4ʰ	30′	0″	♂ diſt. a ν ♐ ortiva	34′	30″	} ad occaſ.
				a ν ♐ occid.	37	10	} auſtrinum.

Aug.	12	veſp.	10h	40′	0″	culminat β ♍ alta	34°	27′	0″
—	—	—	10	43	0	culminat ♂ altus	23	20	0
—	15	—				culm. ♂ una cum β ♑ alt.	23	19	9
—	25	—				culm. ♂ una cum α ♑ alt.	23	39	0
—	26	—				culm. ♂ cum α ♑ altus	23	41	0.

Oct.	8	veſp.	7h	52′	0″	culminat ♂ altus	28°	43′	0″	
						diſtansq. ab ν ♑	0	36	57	ad occ. a.
—	9	—	6	0	0	♂ orient. ſtell. ν ♑	0	0	8	penduli.
						diſtans ab eadem	0	21	30	ad auſtr.
						& a ſocia proxima	0	30	10	
—	10	—	7	48	0	culminat ♂ poſt ν ♑	0	2	10	penduli.
						altus	29	4	0	
—	—	—	6	0	0	♂ diſtab. ab ead.	0	30	10	ad ort. a.
—	26	—	5	45	0	♂ occident. *α γ ♑	0	2	7	penduli.
						eademque auſtr.	0	6	0	circuli.
						diſtans ab illa	0	30	45	ad occ.
—	—	—	7	21	0	culminat ♂ altus	32	12	0	
—	—	—	0	22	59	culmin. γ ♑ alta	32	14	0	
—	—	—	—		—	different. declin.	0	2	0	
—	27	—	5	30	0	♂ oriental. *α γ ♑	0	0	2	penduli,
						eaque borealior	0	7	0	(& vix dum
—	—	—	7	19	9	culm. γ ♑ alta	32	14	0	
—	—	—	0	0	20	culm. ♂ altus	32	24	0	
—	28	—	5	45	0	♂ orient. *α γ ♑	0	2	2	penduli.
						& borealior	0	20	57	circuli.
—	30	—	5	30	0	♂ occident. *α δ ♑	0	0	31	penduli.
						& borealior	0	14	38	circuli.
						diſtans ab eadem	0	16	34.	

Oct.	30	veſp.	7^h	14′	8″	culminat ♂ altus	33°	3′	30″	
—	—	—	0	0	29	culmin. δ ♑ alta	32	47	0	
—	31	—	7	10	35	culmin. δ ♑ alta				
—	—	—	7	12	30	culmin. ♂ altus	33	17	0.	

Nov. 10 veſp. culminat ♂ poſt ι ♒ 0° 4′ 0″ pend.
altus 35 38 30.

Dec. 9 veſp. 5^h 0′ 0″ ♂ diſtat a φ ♒ 53′ 15″ ad ortum.

Anno 1735.

Jan. 25 veſp. 6^h 0′ 0″ ♂ diſt. a ζ in Lino ♓ 39′ 0″ ad occ. b.

Mart.	4	veſp.	6^h	0′	0″	♂ diſt. a	π ♈	29′	5″	ad occ. auſtr.
—	5	—	6	0	0	—	—	32	55	ad ort. auſtr.

April. 9 veſp. 7^h 30′ 0″ ♂ diſt. ab υ ♉ præc. 11′ 20″
a ſequente 15 12.

Maj. 28 veſp. 8^h 0′ 0″ ♂ diſt. ab ε ♊ 59′ 20″ ad auſtr.

Nov. 25 mane 6^h 15′ 0″ ♂ diſt. a λ ♍ 45′ 20″ ad occ.

Nov. 26 mane	6^h	30′	0″	♂ diſt. a λ ♍	9′	5″	ad bor.
				ſine differentia aſcens.			
— 27 —	6	30	0	♂ diſt. a λ ♍	43′	30″	ad ort.

Dec. 7 mane	6^h	45′	0″	♂ diſt. ab α ♎	55′	20″	ad occ.
				occidental. eadem	3	0	penduli.
				& borealior	32	10	circuli.
— 9 —	6	45	0	♂ oriental. *ᵃ κ ♎	29	24	circuli.
				& borealior	2	40	circuli.
				diſtans ab ea	29	30	ad ort.
— 14 —	6	30	0	♂ diſt. a ν ♎	43	45	ad auſtr.

Anno 1736.

Jan. 4 mane	6^h	30′	0″	♂ diſt. a β ♏	43′	0″	ad auſtr.
— — —	0	45	0	♂ diſt. ab ω ♏ borea	37	50	
				occidentalior eadem	2	27	penduli.
				& occidental. auſtr.	2	59	
— 5 —	6	30	0	♂ diſt. a β ♏	54	20	ad auſtr.
— — —	6	45	0	ω ♏ borea in horario			
— — —	0	0	20	♂ in hor. boreal. ſtell.	2	44	
				& diſtans ab ea	5	28	
— — —	0	0	32	ω ♏ auſtrina in horario			
				auſtralior ♂ᵗᵉ	14	46	
				& diſtans ab illo	15	[illegible]2	
— 6 —	6	56	50	ω ♏ borea in horario.			
— — —	0	57	22	ω auſtrina in horario.			
— — —	0	59	58	♂ in horario.			

						auſtralior ω borea	6′	50″
						& borealior auſtrina	5	28
Jan.	7	veſp.	6^h	40′	4″	ſtella ω ♏ auſtr. in hor.		
—	—	—	0	45	26	♂ in hor. auſtral. *ª ω	3	4.

Oct.	12	veſp.	6^h	45′	0″	♂ diſt. a μ in Lino ♓	0°	13′	40″	ad occ.
—	13	mane	0	2	0	culminat ♂ altus	54	55	0	
—	—	—	0	3	30	culminat μ ♓ alta	54	53	0.	

Nov.	3	mane	5^h	30′	0″	♂ diſt. ab ε ♓	23′	15″
						eadem auſtralior	4	45
						ſequentibus diebus ♂ comparatus cum ſtella auſtraliore duarum, quæ præcedunt ſtellam ε in Lino ♓, ut ſequitur.		
—	5	veſp.	5	38	2	ſtella in horario.		
—	—	—	0	39	6	♂ in hor. auſtral. illa	2	45
						diſtans ab eadem	15	30
—	6	—	5	30	36	ſtella in horario		
—	—	—	0	31	11	♂ in hor. auſtr. ſtella	1	0
						& diſtans ab ea	9	35
—	7	—	5	30	0	ſtella in horario.		
—	—	—	0	0	11	♂ in hor. boreal. ſtell.	1	0
						diſtansque ab illa	3	30
—	8	—	5	30	50	♂ in horario		
—	—	—	0	0	55	ſtella in hor. auſtral. ♂^{tis}	2	25
						& diſtans ab illo	2	30.

Nov. 9 veſp. 5^h 30′ 0″ ♂ in horario
— — — 0 0 19 ſtella in hor. auſtr. ♂^{te} 4′ 50″
diſtans ab eodem 6 0
— 10 — 5 30 0 ♂ occidentalior ſtella 0 33 penduli.
eaque borealior 8 0
diſtans ab eadem 11 45.

Dec. 4 veſp. 8^h 16′ 0″ culminat ♂ altus 56° 38′ 0″
— — — 0 0 21 culminat ſtella ζ
in Lino ♓ diſt. a ♂^{te} 0 22 0.

Anno 1737.

Febr. 1 veſp. 9^h 0′ 0″ ♂ diſt. a π ♈ 11′ 6″ ad bor.
— 2 — 9 0 0 — — — 38 30
— 13 — 5 30 0 ♂ diſt. a δ ♈ in cauda 58 55 ad ort.

Mart. 5 veſp. 8^h 0′ 0″ ♂ in eadem linea recta cum A ♉, &
ſocia diſtat ab A 0° 22′ 40″ ad occ.
— 6 — 6 0 0 — — ab A 0 19 10 ad bor.
a ſocia 1 15 0.

Anno 1738.

Jun. 28 mane 4^h 15′ 0″ ♂ diſt. ab ο in Lino ♓ 13′ 0″
orientalior eadem 0 47 penduli.

			& auſtralior		5′	15″	circuli.
Jun. 29 mane	4^h 15′ 0″		♂ jam borealior ead.		9	35.	

Anno 1739.

Jul. 5 vefp.	8^h 0′ 0″	♂ diſt. a Reg. α ♌		1°	3′	30″	
— 7 —	8 15 0	— — —		0	51	15	
		orientalior Reg.		0	2	53	penduli.
		eaque borealior		0	27	25	circuli.
— 8 —	8 0 0	♂ orientalior Reg.		0	5	0	penduli.
		eaque borealior		0	15	30	circuli.

Ann. 1740. vacat

Anno 1741.

Jan. 21 veſp.	5^h 30′ 0″	♂ occidental. ✳ C ♊	1′	8″	penduli.
		eaque auſtralior	5	0	circuli.
— 22 —	— —	occidentalior	2	45	penduli.
		& auſtralior	2	0	circuli.

Ann. 1742. vacat

Anno 1743.

Febr. 25 veſp. 6^h 0′ 0″ ♂ diſtat ab ε ♌ 47′ 35″.

Anno 1744.

Ann. 1744. vacat

Anno 1745.

Jan.	14	mane	4^h	47′	0″	culminat ♂ altus			50°	19′	0″	
—	—	—	0	48	0	culminat γ ♍ alta			50	7	0	
—	15	—	7	0	0	♂ diſt. a γ ♍			0	7	45	ad occ.
—	16	—	7	0	0	—	—	—	0	8	15	ad ort.

§. IV.

VENUS CUM FIXIS.

Anno 1718.

Sept. 20 mane 5^h 0′ 0″ ♀ diſtabat a Regulo α ♌ 22′ 30″.

Oct.	29	mane	5^h	45′	0″	♀ diſtab. a ϑ ♍		31′	5″	ad occ.
—	30	—	5	45	0	—	—	42	30	ad ort.

Dec. 21 mane 7^h 0′ 0″ ♀ diſtab. ab α ♎ 25′ 20″ ad bor.

Anno 1719.

Maji. 27 veſp. 8^h 15′ 0″ ♀ diſtat ab ε Caſtoris 35′ 20″ ad bor.

Jun.	8	veſp.	8^h	30′	0″	♀ diſt. a ϰ Pollucis		1′	5″	ad auſtr.
Jul.	14	veſp.	8^h	0′	0″	♀ diſt. a ρ ♌	1°	8′	0″	ad bor.
—	26	—	8	0	0	— a σ ♌	1	5	0	ad ort. auſtr.
Aug.	28	veſp.	7^h	30′	0″	♀ diſt. a ſpica ♍		39′	30″	ad ort.
Nov.	30	mane	5^h	0′	0″	♀ diſt. ab α ♎		49′	30″	ad occ.
Dec.	1	mane	5^h	0′	0″	♀ diſt. ab α ♎	0°	55′	36″	ad occ.
—	2	—	5	30	0	— — —	1	1	0	ad occ.
						& a μ ♎	0	56	0	ad auſtr.
—	3	—	5	30	0	— ab α ♎	1	5	0	
						— a μ ♎	0	44	0	
						& a vicina illic	0	40	0	
—	4	—	5	0	0	— ab α ♎	1	10	0	
						— a μ ♎	0	38	0	
—	5	—	5	0	0	— ab α ♎	1	13	0	
						— a μ ♎	0	29	0	
—	6	—	5	30	0	— a μ ♎	0	27	0	ad ort. a.
—	8	—	5	30	0	— a μ ♎	0	39	0	ad ort.
—	9	—	5	30	0	— a μ ♎	0	54	0	
—	10	—	5	30	0	— a μ ♎	1	8	0.	

Anno 1720.

Febr.	18	mane	6^h	0′	0″	♀ diſt. a π ♐	1°	15′	0″	ad auſtr.

Anno 1721.

Jan.	2	vesp.	5^h	30′	0″	♀ dist.	a ι ♑	0°	28′	0″	ad bor.
—	3	—	5	30	0	—	—	1	3	0	ad ort.
—	5	—	6	0	0	—	a γ ♑	0	56	45	ad occ. bor.
—	6	—	5	0	0	—	—	0	57	10	ad bor.
						—	a δ ♑	1	22	20	ad occ.
—	8	—	5	30	0	—	—	1	30	0	ad bor.
—	11	—	5	45	0	—	a ι ♒	0	27	0	ad occ.
—	12	—	5	30	0	—	—	1	6	0	ad bor.
—	21	—	6	30	0	—	a λ ♒	1	16	0	ad auſtr.
—	22	—	6	45	0	—	—	0	59	45	ad ort.

Mart.	22	veſp.	7^h	0′	0″	♀ diſt.	a δ ♈	0°	32′	0″	ad bor.
							a ζ ♈	0	2	0	
—	23	—	7	15	0	—	a δ ♈	1	1	0	ad ort. b.
							a ζ ♈	0	34	10	ad occ. a.
—	24	—	7	30	0	—	— —	0	53	20	ad ort. a.
							a τ ♈ prima	0	39	45	
							a τ ♈ ſecund.	0	55	30	
—	26	—	7	0	0	—	a τ ♈ prima	0	56	45	
							a τ ♈ ſecund.	1	15	30	
							a τ ♈ tertia	1	24	30	
—	31	—	7	15	0	—	a lucid. Plej.	1	7	15	
							a Merope	1	6	0	
							ab Atlante	1	2	30.	

April.	1	veſp.	7^h	0′	0″	♀ diſt.	ab Atlante	1°	9′	15″	
							ab Alcione	1	30	0	
—	23	—	8	0	0	—	a β ♉ corn. b.	1	30	0.	
Aug.	10	mane	4^h	30′	0″	♀ diſt,	a ν Caſtoris	1°	14′	0″	ad auſt.
—	30	—	4	0	0	—	a *f* ♊	1	16	45	ad bor.
							a *g* ♊	0	44	20	ad occ. a.
Oct.	25	mane	6^h	0′	0″	♀ diſt.	a β ♍		52′	55″	ad occ. bor.
—	26	—	6	0	0	—	—		49	55	ad ort.
Nov.	1	mane	6^h	0′	0″	♀ diſt.	ab ν ♍	0°	11′	10″	ad bor.
—	2	—	6	0	0	—	—	1	10	20	ad ort.
—	5	—	6	0	0	—	a γ ♍	1	13	10	ad auſtr.
—	6	—	6	0	0	—	—	1	15	10	ad ort. auſtr.
—	11	—	6	15	0	—	a θ ♍	1	12	0	ad occ.
—	12	—	6	15	0	—	—	0	3	50	ad bor.
—	13	—	6	15	0	—	—	1	6	0	ad ort.
Dec.	3	mane	6^h	30′	0″	♀ diſt.	a μ ♎	0°	20′	30″	ad auſtr.
—	4	—	6	30	0	—	ab α ♎	1	19	0	ad bor.
—	19	—	6	30	0	—	a ν ♏	0	43	0	
—	20	—	7	0	0	—	—	0	35	30	ad ort.

Anno 1722.

Oct.	8	veſp.	7^h	15′	0″	♀ diſt.	a δ ♏		14′	55″	ad auſtr.
—	15	—	7	0	0	—	a σ ♏		57	35	ad bor.

Nov.	12	veſp.	5^h	45′	0″	♀ diſt.	a φ ♐	0°	48′	0″	ad ort. bor.
							a σ ♐	1	30	0	ad occ.
—	13	—	6	0	0	—	—	0	33	40	ad occ.
—	14	—	5	45	0	—	—	0	22	40	ad ort.

Dec.	24	veſp.	6^h	0′	0″	♀ diſt.	a ϑ ♑	29′	25″	ad occ.
—	25	—	6	0	0	—	—	40	30	ad bor.
—	26	—	6	0	0	—	—	59	5.	

Anno 1723.

Febr.	27	veſp.	5^h	30′	0″	♀ diſt.	ab α ♑	duplici	1°	17′	0″	ad occ.
							a β ♑	—	1	21	0	
—	28	—	5	30	0	—	ab α ♑	—	1	12	0	ad occ.
							a β ♑	—	1	3	0.	

Mart.	2	veſp.	5^h	30′	0″	♀ diſt.	a β ♑	duplici	0°	53′	20″	ad bor.
							a ν ♑	—	1	6	15	ad ort. a.

Sept. 6 mane 5^h 0′ 0″ ♀ diſt. ab α ♌ Regulo 49′ 5″ ad bor.

Anno 1724.

April.	16	veſp.	7h 30′ 0″	♀	diſt. a ν ♉			52′	30″	ad bor.
—	17	—	7 30 0	—	—			36	40	ad ort.

Jul.	2	veſp.	8h 0′ 0″	♀	diſt. ab α ♌ Reg.		53′	0″	ad occ.
—	3	—	8 0 0	—	—	—	5	0	
—	4	—	8 45 0	—	—	—	41	50	ad ort.

Nov.	1	mane	6h 0′ 0″	♀	diſt. a β ♍	1°	5′	30″	ad occ. auſtr.
—	2	—	5 0 0	—	—	0	16	0	ad auſtr.
—	3	—	6 0 0	—	—	0	52	15	ad ort. auſtr.
—	10	—	5 15 0	—	a γ ♍	0	15	45	ad ort.
					a ſocia	0	29	25	
—	22	—	6 30 0	—	a ϑ ♍	0	23	55	ad occ.
—	23	—	6 0 0	—	—	0	39	55	ad ort.

Dec.	7	mane	6h 0′ 0″	♀	diſt. a ϰ ♍	32′	0″	ad auſtr.

Anno 1725.

Febr.	4	mane	6h 0′ 0″	♀	diſt. ab ο ♐	0°	31′	20″	ad ort. auſtr.
					a π ♐	1	2	20	ad occ.
—	5	—	6 0 0	—	—	0	54	10	ad auſtr.

Dec.	16	veſp.	5^h	30′	0″	♀ diſt.	ab ν ♑	1°	15′	20″	ad occ.
							a vicina	0	17	28	
—	24	—	5	30	0	—	a γ ♑	0	57	25	ad occ.
—	25	—	5	30	0	—	—	0	46	30	ad bor.
—	26	—	5	15	0	—	a δ ♑	0	45	15	ad bor.
—	27	—	5	15	0	—	—	1	10	15	ad ort. b.
—	30	—	5	30	0	—	a ι ♒	0	54	12	ad occ.
—	31	—	5	15	0	—	—	0	32	50	ad bor.

Anno 1726.

Jan.	5	veſp.	5^h	30′	0″	♀ diſt.	a σ ♒	0°	43′	6″	ad occ.
—	6	—	5	30	0	—	—	0	21	45	ad ort.
—	10	—	5	30	0	—	a λ ♒	1	23	30	ad occ.
—	11	—	5	30	0	—	—	0	31	35	ad auſtr.
—	—	—	7	30	0	—	—	0	29	2	
—	12	—	5	30	0	—	—	0	49	5	ad ort.
—	—	—	7	30	0	—	—	0	53	5	
—	17	—	5	30	0	—	a φ ♒	0	51	12	ad bor.

Febr.	13	veſp.	6^h	0′	0″	♀ diſt.	a δ in Lino ♓		44′	10″	ad bor.
							a ſocia		48	30	
—	14	—	6	15	0	—	a δ ♓		43	45	ad ort. b.

Mart.	9	veſp.	6^h	30′	0″	♀ diſt.	ab ν in Lino ♓	1°	4′	0″	ad bor.
							a ſocia borea	1	10	30	ad auſt.
—	10	—	7	30	0	—	ab eadem ſoc.	0	54	25	ad auſt.

Sept.	19	mane	5^h	0′	0″	♀ diſt. ab α ♌ Regulo		55′	40″	ad occ.
—	20	—	—		—	propter nubes non potuit obſervari ☌ ♀ris cum Regulo; illa tamen per nubes aliquoties ſatis lucide promicante nunquam potuit videri Regulus; an forte tectus ab illa.				

Oct.	18	mane	5^h	45′	0″	♀ diſt. ab ν ♍	0°	17′	55″	ad occ. bor.
						a ſocia	0	21	30	
—	19	—	5	45	0	— ab ν ♍	0	57	10	ad ort. bor.
—	22	—	5	30	0	— a γ ♍	1	16	0	ad occ. auſt.

Anno 1727.

April.	26	veſp.	7^h	50′	0″	♀ diſt. ab A ♉	1°	11′	15″	ad occ.

Maji.	4	veſp.	7^h	45′	0″	♀ diſt. a τ ♉	0°	9′	25″	ad bor.
—	5	—	8	0	0	— —	1	13	0	ad ort.

Jul.	8	veſp.	8^h	0′	0″	♀ diſt. a Regulo α ♌	1°	8′	55″	ad occ. b.
—	9	—	8	0	0	— — —	1	12	20	ad ort. b.

Aug.	26	veſp.	7^h	30′	0″	♀ diſt. a ſpica ♍	1°	17′	0″	ad occ.

Dec. 20

Dec.	20	mane	9^h	3′	30″	♀ culminat alta	37°	0′	0″	
—	25	—	8	59	0	— —	36	26	0	
—	26	—	8	56	24	— —	36	10	0	
—	28	—	5	0	0	♀ diſt. a γ ♎	0	41	24	
—	—	—	6	45	0	— —	0	39	55	
—	—	—	8	55	0	♀ culminat alta	35	48	0.	

Anno 1728.

Jan.	1	mane	8^h	48′	24″	♀ culminat alta	35°	7′	0″	
—	2	—	6	30	0	♀ diſt. a ϑ ♎	0	51	50	ad occ. b.
—	3	—	5	45	0	— —	0	20	30	ad bor.
—	—	—	6	45	0	— —	0	21	10	
—	4	—	5	15	0	— —	0	54	24	ad ort.
—	—	—	5	45	0	♀ diſt. a φ ♏	0	36	40	ad occ.
—	—	—	6	45	0	— —	0	35	50	
—	5	—	5	30	0	— —	0	17	5	ad auſtr.
—	—	—	6	45	0	— —	0	19	25.	

Febr. 15	mane	5^h	45′	0″	♀ diſt. a ξ ♐		53′	10″	ad ort.
					a ſocia bor.		55	25.	

Anno 1729.

Jan. 6	veſp.	5^h	30′	0″	♀ diſt. a δ ♑	1°	1′	0″	ad occ.

Mart. 22	vesp.	$7^h\ 0'\ 0''$	♀ dist. a δ ♈		33′	20″	ad bor.	
Sept. 9	mane	$4^h\ 30'\ 0''$	♀ dist. a δ ♋		25′	10″	ad bor.	
— 29	—	5 30 0	— a ν ♌		46	5	ad occ.	
— 30	—	5 30 0	— —		22	0	ad ort.	
Oct. 1	mane	$5^h\ 30'\ 0'$	♀ dist. a Reg. α ♌	1°	2′	45″	ad occ.	
— 2	—	5 30 0	— — —	0	23	15	ad auſtr.	
— 31	—	6 0 0	— ab η ♍	0	44	35	ad occ.	
Nov. 1	mane	$6^h\ 0'\ 0''$	♀ dist. ab η ♍		29′	50″	ad ort.	
— 11	—	6 30 0	— a ϑ ♍		46	5	ad occ.	
— 12	—	6 30 0	— —		25	50	ad ort.	

Anno 1730.

Sept. 27	vesp.	$6^h\ 30'\ 0''$	♀ dist. a ι ♎		40′	30″	ad occ.	
— 28	—	6 30 0	— —		30	20	ad ort.	
Oct. 8	vesp.	$6^h\ 30'\ 0''$	♀ dist. a δ ♏	0°	27′	20″	ad ort. auſtr.	
— 9	—	6 30 0	— —	1	30	0	ad ort.	
Nov. 13	vesp.	$5^h\ 45'\ 0''$	♀ dist. a σ ♐		39′	50″	ad occ.	

Anno 1731.

Sept.	5	mane	5ʰ	0′	0″	♀ diſt. a Reg. ♌		0°	36′	0″	ad bor.
—	6	—	5	0	0	—	—	1	13	0	ad ort.

Anno 1732.

Maji.	13	veſp.	8ʰ	0′	0″	♀ diſt.	ab ε ♊	1°	1′	10″	ad occ.
—	22	—	9	0	0	—	ab A ♉	0	23	20	ad auſtr.

Jul.	1	veſp.	8ʰ	45′	0″	♀ diſt.	a ν ♌	0°	43′	0″	ad bor.
—	5	—	8	0	0	—	a Reg. α ♌	1	3	0	ad ort. a.

Nov.	9	mane	6ʰ	15′	0″	♀ diſt.	ab η ♍		49′	50″	ad occ.
							a ſocia		33	5	
—	10	—	6	30	0	—	ab η ♍		18	0	ad auſtr.
							a ſocia		28	30	ad ort.
—	22	—	6	30	0	—	a ϑ ♍		16	5	ad occ.
—	23	—	6	30	0	—	—		55	10	ad ort.

Anno 1733.

Nov.	3	veſp.	6ʰ	0′	0″	♀ diſt.	a θ Oph.	0°	40′	45″	ad occ.
—	4	—	5	50	0	—	—	0	32	10	ad ort.
							& a B Ophiuchi	0	53	0	ad auſtr.
—	15	—	6	0	0	♀ diſt.	a λ ♐	1	5	30	ad occ.

Nov.	16	veſp.	5^h	30′	0″	♀ diſt. a λ ♐	0°	5′	0″	ad ort.
						eratq. ♀ orient.	0	0	30	penduli.
—	25	—	5	30	0	♀ diſt. a ψ ♐	0	40	20	ad bor.
—	27	—	5	30	0	— a χ ♐ maj.	0	20	25	ad ort. b.
						— a χ ♐ min.	0	22	40	ad ort. a.
						major diſt. a min.	0	30	36.	

Dec.	24	veſp.	5^h	30′	0″	♀ diſt. a γ ♑	49′	10″	ad occ. bor.
—	25	—	5	30	0	— —	59	0	ad ort. bor.
—	26	—	5	30	0	— a δ ♑	46	15	ad occ. bor.
—	30	—	5	15	0	— a ι ♒	50	20	ad occ.
—	—	—	7	0	0	— —	48	15	
—	31	—	6	0	0	— —	45	20	ad bor.

Anno 1734.

Jan.	1	veſp.	5^h	30′	0″	♀ diſt. ab ε ♒	1°	13′	0″	ad auſtr.
—	11	—	5	30	0	— a λ ♒	0	25	35	ad auſtr.
—	16	—	7	0	0	— a φ ♒	0	45	5	ad bor.
—	17	—	7	0	0	— —	1	1	40	ad ort.
						ab ν ♒	0	52	30	ad occ. bor.
—	18	—	5	30	0	— —	0	34	25	ad bor.

Febr. 14 veſp. 6^h 0′ 0″ ♀ diſt. a δ in Lino ♓ 54′ 0″.

April. 3 Meridie ipſo quaſi cum Sole viſa
♀ culminare alta 62° 58′ 0″.

Sept.	2	mane	4^h	45′	0″	♀ diſt. a δ ♋	15′	50″	ad ort.	
—	21	—	5	0	0	— a Reg. α ♌	58	0	ad ort. bor.	

Oct.	1	mane	5^h	30′	0″	♀ diſt. a χ ♌	24′	45″	ad occ.
						eratque ♀ occid.	1	38	pend.
						& borealior ſtell.	3	30	circuli.
—	28	—	6	15	0	♀ diſt. a ϑ ♍			
						occidental. ſtella	2	42	penduli.
						eaque borealior	4	23	circuli.

Anno 1735.

Aug.	28	veſp.	7^h	0′	0″	♀ diſt. a ſpica ♍	34′	40″	ad ort.

Anno 1736.

Jan.	3	mane	6^h	50′	0″	♀ occidental. ** ϑ ♎	1′	0″	penduli.
						eaque borealior	23	0	
						diſtans ab eadem	26	5	
—	4	—	6	56	0	♀ orientalior **	2	37	
						borealior	10	0	
						diſtans	38	15	
—	5	—	6	50	0	♀ diſt. a parva ſtella, quæ eſt ad ortum ſtellæ ϑ (vide Zod. ſtell. Flamſt.)	15	22.	

				& ♀ occident. ſtella	0′	20″	pend.
				eaque auſtralior	14	40.	

Febr.	16	mane	6^h 0′ 0″	♀ diſt. a π ♐ circiter	43′	0″	ad bor.

Anno 1737.

Jan.	5	veſp.	5^h 30′ 0″	♀ diſt. a γ ♑	48′	10″	ad bor.
—	6	—	5 30 0	— a δ ♑	50	40	ad occ. bor.

Oct.	8	mane	5^h 40′ 0″	♀ oriental. *ᵃ ϱ ♌	3′	30″	penduli.
				eaque borealior	2	30	circuli.
				diſtans ab eadem	53	20	ad ort.
—	14	—	6 0 0	♀ occident. *ᵃ χ ♌	1	41	pend.
				eaque auſtralior	19	30	circuli.
				diſtans ab eadem	31	25	
—	25	—	6 15 0	♀ oriental. *ᵃ β ♍	2	6	pend.
				eaque borealior	31	50	circuli.
				diſtans ab eadem	43	45	
—	26	—	6 15 0	♀ oriental. *ᵃ β ♍	6	22	pend.
				eaque borealior	6	0	circuli.
—	31	—	6 20 0	♀ occident. *ᵃ ν ♍	0	40	pend.
				eaque borealior	17	4	circuli.
				diſtans ab eadem	19	48.	

Nov.	1	mane	6^h 20′ 0″	♀ oriental. *ᵃ ν ♍	3′	50″	pend.
				eaque auſtralior	9	55	circuli.

Nov. 11 mane	6ʰ 30′ 0″	♀ occident. *ª ϑ ♍	1′	4″	pend.
		eaque borealior	8	53	circuli.
		diſtans ab eadem	17	45.	

Dec. 6 mane	6ʰ 45′ 0″	♀ oriental. *ª ν ♎	0′	40″	pend.
		eaque borealior	21	50	circuli.
		diſtans ab eadem	24	30	
— 18 —	6 45 0	♀ oriental. *ª β ♏	2	24	pend.
		& borealior eadem	7	30	circuli.
		diſtans ab ea	36	10.	

Anno 1738.

Nov. 14 veſp.	5ʰ 15′ 0″	♀ oriental. *ª σ ♐	0′	35″	penduli.
		& auſtralior	2	0	circuli.
		diſtans ab ea	8	15.	

Anno 1739.

Mart. 4 mane	5ʰ 45′ 0″	♀ occident. *ª β ♑	0′	56″	penduli.
		& auſtralior	1	20	circuli.
		diſtans ab ea	14	10	
— 5 —	5 45 0	♀ oriental. *ª β ♑	2	0	penduli.
		& auſtralior	0	50	circuli.
		diſtans ab ea	29	30.	

April. 14 mane 4ʰ 45′ 0″ ♀ borealior *ᵃ λ ♒ 11′ 0″ circuli.
diſtans ab ea 27 20 ad occ.

Anno 1740.

Jul. 3 veſp. 7ʰ 45′ 0″ ♀ occident. *ᵃ α ♌ 4′ 22″ penduli.
& borealior 11 57 circuli.
— 4 — 7 30 0 ♀ occidentalior 1 42 penduli.
& auſtralior 9 40.

Oct. 29 mane 6ʰ 10′ 0″ ♀ in eadem præciſe aſc. recta cum ſtellula, quæ ſtellam τ ♌ proxime ſequitur ſecundum Eclipticam (vid. Zodiac. Flamſt.), eratque
♀ diſtans ab ea 4′ 30″ ad auſtr.

Nov. 9 mane 6ʰ 34′ 0″ ♀ occident. *ᵃ ν ♍ 2′ 54″ penduli.
eademque boreal. 6 30 circuli.
— 10 — 6 34 0 ♀ oriental. *ᵃ ν ♍ 1 0 penduli.
eaque auſtralior 15 40 circuli.
diſtans ab eadem 21 50 proxime.
— 22 — 6 43 0 ♀ oriental. *ᵃ ϑ ♍ 4 27 penduli.
eaque auſtralior 13 20 circuli.

Anno 1741.

Jan. 1 mane 7ʰ 0′ 0″ ♀ oriental. *ᵃ ν ♏ 1′ 50″ penduli.
& borealior 19 0 circuli.
diſtans ab ea 34 0 proxime.

Dec. 24

Dec. 24 veſp. 6^h 0′ 0″ ♀ diſt. a γ ♑ 39′ 40″ ad bor.

Anno 1742.

Jul. 11 mane	4^h 15′ 0″	♀ orientalior *^a ε ♉	2′	8″	penduli.
		& auſtralior	0	41	circuli.
		diſtans ab ea	2	15.	

Sept. 16 mane	5^h 30′ 0″	♀ diſt. a ν ♌	45′	20″	ad bor.
— 20 —	5 30 0	♀ orient. *^a α ♌	5	45	penduli.
		eaque auſtralior	3	45	circuli.

CAPUT VI.

IMMERSIONES, ET EMERSIONES SATELLITUM JOVIS.

Anno 1718.

Febr.	10	p. m.	9^h	40′	0″	Emerſ.	1
—	13	a. m.	0	20	0	—	3
—	22	p. m.	8	25	0	—	2
—	25	a. m.	1	32	30	—	1
—	26	p. m.	8	1	30	—	1.
Mart.	9	a. m.	1^h	36′	30″	Emerſ.	2
—	12	p. m.	11	55	0	—	1
—	14	p. m.	6	21	30	—	1
—	21	p. m.	8	20	0	—	1
—	—	p. m.	8	51	45	Immerſ.	4.
April.	5	a. m.	0^h	15′	30″	Emerſ.	1
—	13	p. m.	8	39	40	—	1
—	20	p. m.	10	36	30	—	1.
Maji.	27	p. m.	9^h	6′	0″	Immerſ.	4.

Oct.	4	a.	m.	5^h	13′	30″	Immerſ.	1
—	8	a.	m.	5	26	0	—	2
—	20	a.	m.	3	33	0	—	1.
Nov.	19	a.	m.	5^h	31′	0″	Immerſ.	1 dub.

Anno 1719.

Jan.	4	a.	m.	5^h	33′	20″	Immerſ.	1
—	13	a.	m.	1	51	0	—	1
—	21	p.	m.	10	11	0	—	1
—	27	a.	m.	5	36	30	—	1
—	29	p.	m.	9	58	0	—	2
—	—	p.	m.	11	42	0	—	3.
Febr.	6	a.	m.	0^h	30′	30″	Immerſ.	2
—	—	p.	m.	8	26	0	—	4
—	22	p.	m.	9	2	0	Emerſ.	1.
Mart.	3	a.	m.	0^h	19′	0″	Emerſ.	2
—	31	a.	m.	1	14	0	—	1.
April.	16	p.	m.	11^h	32′	0″	Emerſ.	1.
Dec.	8	a.	m.	6^h	42′	0″	Immerſ.	1
—	12	a.	m.	5	54	0	—	2.

Anno 1720.

Febr.	8	a.	m.	4^h	42′	0″	Immerſ.	1.	
Mart.	2	a.	m.	4^h	57′	0″	Immerſ.	1	
—	28	p.	m.	8	29	0	Emerſ.	1.	
April.	27	p.	m.	10^h	42′	30″	Emerſ.	1.	
Maji.	13	p.	m.	9^h	2′	0″	Emerſ.	1	
—	20	p.	m.	10	57	0	—	1	dub.
Jun.	5	p.	m.	9^h	13′	0″	Emerſ.	1.	

Anno 1721.

Jun.	1	p.	m.	10^h	3′	0″	Emerſ.	1	
—	17	p.	m.	8	17	0	—	1.	

Anno 1722.

April.	3	a.	m.	5^h	31′	30″	Immerſ.	1	dub.
Maji.	11	a.	m.	4^h	5′	0″	Immerſ.	1	
—	12	p.	m.	10	33	0	—	1.	

Jun.	5	a. m.	0^h	52′	0″	Emerſ.	1
—	12	p. m.	9	13	0	—	1
—	20	p. m.	11	7	0	—	1.

Jul.	6	p. m.	9^h	21′	0″	Emerſ.	1.

Anno 1723.

Febr.	11	a. m.	6^h	9′	30″	Immerſ.	1.

Mart.	22	a. m.	4^h	41′	0″	Immerſ.	1.

April.	30	a. m.	3^h	15′	30″	Immerſ.	1.

Maji.	16	a. m.	1^h	34′	0″	Immerſ.	1.

Jun.	16	p. m.	10^h	3′	0″	Immerſ.	1.

Jul.	2	p. m.	10^h	30′	0″	Immerſ.	1
—	10	a. m.	0	22	0	Emerſ.	1
—	25	p. m.	10	35	30	—	1.

Anno 1724.

Aug.	5	p. m.	10^h	16'	0"	Emerſ. 1
—	28	p. m.	10	33	30	— 1.

Sept.	6	p. m.	7^h	2'	30"	Emerſ. 1
—	17	p. m.	7	4	0	— 2
—	20	p. m.	10	52	0	— 1
—	29	p. m.	7	22	0	— 1
—	—	p. m.	8	45	0	2^{dus} Satelles texit 1^{mum}.

Oct.	1	p. m.	8^h	15'	0"	4^{tus} texit 1^{mum}.
—	4	p. m.	6	circ.		3^{tius} texit 1^{mum}.
—	—	p. m.	10	circ.		3^{tius} texit 2^{dum}.
—	6	p. m.	9	19'	30"	Emerſ. 1
—	11	p. m.	8	50	0	arcta conjunctio 3^{tii} & 1^{mi} illo hunc ferme obtegente.
—	12	p. m.	6	35	0	arctiſſima conjunctio 1^{mi} & 2^{di} illo hunc tegente.
—	15	p. m.	5	47	0	Emerſio 1^{mi} primum viſa, an tum prodierit ex umbra, an forſitan paulo citius, & ob lucem diei inviſibilis fuerit, dubium nonnihil eſt.
—	19	p. m.	6	58	0	Emerſ. 2
—	—	p. m.	8	40	0	— 1^{mus} texit 2^{dum}.
—	22	p. m.	7	43	0	Emerſ. 1 dubia ob aerem craſſum.

Nov.	6	p.	m.	6^h	8′	0″	Immerſ.	3	Emerſionem nubes occultarunt.
—	20	p.	m.	6	44	0	Emerſ.	2	
—	30	p.	m.	6	14	0	—	1.	

Dec.	23	p.	m.	6^h	18′	0″	Emerſ.	1.

Anno 1725.

Jun.	23	a.	m.	2^h	28′	0″	Immerſ.	3.
Jul.	8	a.	m.	2^h	55′	30″	Immerſ.	1.
Aug.	8	p.	m.	11^h	27′	0″	Immerſ.	1.
Sept.	18	p.	m.	6^h	51′	30″	Emerſ.	1.

Oct.	2	p.	m.	10^h	45′	0″	Emerſ.	1	
—	11	p.	m.	7	9	0	—	1	
—	13	p.	m.	6	26	0	—	2	
—	15	p.	m.	6	46	0	prodiit	3	de ſub corpore ♃^{is}, poſt quod latuerat dein conſpicuus, &
—	—	p.	m.	7	4	0	Immerſ.	3	in umbram ♃^{is}.

Oct.	18	p.	m.	9^h	$8'$	$0''$	Emerſ.	1	
—	20	p.	m.	9	6	0	—	2	
—	25	p.	m.	11	5	0	—	1	
—	27	p.	m.	11	45	30	—	2.	
Nov.	3	p.	m.	7^h	$27'$	$30''$	Emerſ.	1	
—	19	p.	m.	5	46	0	—	1	
—	20	p.	m.	6	26	0	—	3	cœpit emergere.
—	26	p.	m.	7	38	30	—	1.	
Dec.	12	p.	m.	5^h	$53'$	$48''$	Emerſ.	1	
—	16	p.	m.	5	59	0	—	2	
—	23	p.	m.	8	31	40	—	2.	

Anño 1726.

Jan.	2	p.	m.	6^h	$15'$	$0''$	Emerſ.	3	
—	4	p.	m.	5	51	8	—	1	
—	6	p.	m.	7	45	0	—	4	
—	9	p.	m.	6	17	0	Emerſ.	3	a tergo ♃^{is}, &
—	—	p.	m.	7	8	0	Immerſ.	3	in umbram ♃^{is}.
—	11	p.	m.	7	50	0	Emerſ.	1	
—	17	p.	m.	5	29	0	—	2	
—	27	p.	m.	6	5	30	—	1	dubia ob nubilaginem.

Aug.	12	a.	m.	3h	3′	30″	Immerſ.	1	
—	20	p.	m.	11	28	15	—	1	
—	28	a.	m.	1	23	30	—	1.	
Sept.	4	a.	m.	3h	18′	48″	Immerſ.	1	
—	5	p.	m.	9	49	25	—	1	
—	9	a.	m.	4	34	0	—	2	
—	11	a.	m.	5	17	30	—	1	
—	12	p.	m.	11	46	15	—	1	
—	19	p.	m.	8	40	0	—	2	P. Gaubil 8h 37′ 50″.
—	26	p.	m.	11	21	0	—	2	
—	28	p.	m.	10	8	0	—	1.	
Oct.	2	a.	m.	0h	29′	30″	Immerſ.	3	
—	4	a.	m.	1	59	35	—	2	
—	—	a.	m.	5	35	30	—	1	
—	6	a.	m.	0	4	50	—	1	
—	11	a.	m.	4	38	0	—	2	
—	14	p.	m.	8	31	15	Emerſ.	2	
—	21	p.	m.	11	12	15	—	2	
—	23	p.	m.	7	4	0	—	1.	
Nov.	6	p.	m.	10h	53′	30″	Emerſ.	1	
—	—	p.	m.	11	4	0	—	3	
—	15	p.	m.	7	17	20	—	1	
—	—	p.	m.	8	26	10	—	2	
—	22	p.	m.	9	11	40	—	1.	

Nov.	22	p.	m.	11^h	2′	15″	Emerſ.	2	
—	29	p.	m.	11	2	45	—	1.	

Dec.	1	p.	m.	5^h	32′	20″	Emerſ.	1	
—	8	p.	m.	7	26	0	—	1	
—	10	p.	m.	5	33	0	—	2	
—	12	p.	m.	7	0	15	—	3	cœpit emergere.
—	15	p.	m.	9	15	20	—	1	
—	17	p.	m.	8	9	0	—	2	
—	19	p.	m.	8	41	45	Satelles	3	cœpit deficere lumine.
—	—	p.	m.	8	46	25	Immerſ.	3	plene
—	—	p.	m.	10	57	40	Emerg.	3	cœpit
—	—	p.	m.	11	2	10	luxit integre plena claritate		
—	24	p.	m.	5	38	10	Emerſ.	1.	

Anno 1727.

Jan.	7	p.	m.	9^h	21′	0″	Emerſ.	1
—	18	p.	m.	7	47	30	—	2
—	31	p.	m.	8	45	0	Immerſ.	3.

Sept.	16	a.	m.	3^h	16′	15″	Immerſ.	1
—	17	p.	m.	9	46	0	—	1
—	20	p.	m.	11	1	40	—	2.

Oct.	9	a.	m.	3^h	37′	30″	Immerſ.	1
—	16	a.	m.	5	34	10	—	1.

Oct.	16	p. m.	9^h	56′	22″	Immerſ.	3	
—	18	a. m.	0	3	0	—	1	
—	22	p. m.	10	50	27	—	2	
—	31	a. m.	5	57	30	—	3	
Nov.	6	a. m.	4^h	5′	40″	Immerſ.	2	
—	10	a. m.	0	13	6	—	1	
—	11	p. m.	6	43	0	—	1	
—	21	p. m.	7	57	0	Emerſ.	3.	
Dec.	1	a. m.	3^h	40′	45″	Emerſ.	2	
—	3	a. m.	2	30	42	—	1	
—	4	p. m.	8	28	30	—	1	
—	10	a. m.	4	22	5	—	1	tubo 13 pedum.
—	11	p. m.	7	37	42	—	2	
—	—	p. m.	10	50	0	—	1	
—	13	p. m.	5	17	50	—	1	
—	18	p. m.	10	11	13	—	2	
—	19	a. m.	0	40	44	—	1	
—	20	p. m.	7	8	20	—	1	
—	26	a. m.	0	47	39	—	2	cœpit emergere.
—	—	a. m.	2	32	33	—	1	
—	27	p. m.	8	59	40	—	1.	

Anno 1728.

Jan.	3	p. m.	5^h	43′	40″	Immerſ.	3	plene diſparuit.
—	—	p. m.	7	42	0	Emerſ.	3	primum emicuit.

Jan.	3	p.	m.	10^h	51′	50″	Emerſ.	1	
—	5	p.	m.	5	20	0	—	1	
—	10	p.	m.	7	30	0	circiter	3	prodiit a tergo ♃is.
—	—	p.	m.	9	42	52	Immerſ.	3	plene diſparuit, 5 circiter minuta inſumens in ſua Immerſione.
—	—	p.	m.	11	42	20	Emerſ.	3	primum emicuit, item 5 minuta inſumens, dum plene luceret.
—	11	a.	m.	0	45	18	—	1	
—	12	p.	m.	7	13	27	—	1	
—	—	p.	m.	7	16	16	—	2	
—	19	p.	m.	9	5	40	—	1	
—	—	p.	m.	9	51	0	—	2	dub.
—	26	p.	m.	10	59	0	—	1	
—	28	p.	m.	5	27	20	—	1.	
Febr.	11	p.	m.	9^h	16′	40″	Emerſ.	1	
—	13	p.	m.	7	3	45	—	2	
—	18	p.	m.	11	12	30	—	1	dub.
—	20	p.	m.	5	41	50	—	1	
—	—	p.	m.	9	46	0	—	2	
—	22	p.	m.	9	42	30	—	3	plene diſparuit.
Mart.	21	p.	m.	7^h	58′	55″	Emerſ.	1.	
Aug.	19	a.	m.	4^h	30′	0″	Immerſ.	1	tubo 14 ped.

Sept.	20	a.	m.	1^h	12′	12″	Immerſ.	1.	
Oct.	4	a.	m.	5^h	6′	0″	Immerſ.	1	
—	9	a.	m.	6	6	30	—	3	
—	20	a.	m.	3	26	15	—	1	dub.
—	27	a.	m.	5	19	30	—	1	
—	30	a.	m.	3	34	10	—	2.	
Nov.	5	a.	m.	1^h	42′	45″	Immerſ.	1	
—	6	a.	m.	6	8	45	—	2	
—	—	p.	m.	10	4	10	—	3	
—	7	a.	m.	0	47	15	Emerſ.	3	
—	12	a.	m.	3	36	15	Immerſ.	1	
—	13	p.	m.	10	4	10	—	1	
—	19	a.	m.	5	28	20	—	1	
—	28	a.	m.	1	47	50	—	1	
—	29	p.	m.	8	16	35	—	1.	
Dec.	1	a.	m.	3^h	30′	20″	Immerſ.	2	
—	6	p.	m.	10	8	0	—	1	
—	8	a.	m.	5	35	55	—	2	
—	12	a.	m.	5	30	45	—	1	
—	15	p.	m.	6	27	0	—	1	
—	22	p.	m.	10	31	0	Emerſ.	1	
—	31	p.	m.	6	50	15	—	1.	

Anno 1729.

Jan.	2	a. m.	5^h	21′	30″	Emerſ.	2	
—	5	p. m.	6	37	0	—	2	
—	7	p. m.	8	40	40	—	1	
—	16	p. m.	9	24	0	—	4	
—	20	p. m.	11	44	15	—	2	
—	22	a. m.	0	24	10	—	1	
—	23	p. m.	6	52	20	—	1	
—	24	p. m.	5	24	20	Immerſ.	3	
—	—	p. m.	8	21	40	Emerſ.	3	
—	27	a. m.	2	20	0	—	2	
—	30	p. m.	8	46	15	—	1	
—	31	p. m.	9	25	36	Immerſ.	3.	
Febr.	1	a. m.	0^h	21′	0″	Emerſ.	3	
—	6	p. m.	6	14	18	—	2	
—	13	p. m.	8	49	0	—	2	
—	15	p. m.	7	4	0	—	1	dub.
—	20	p. m.	11	28	45	—	2.	
Mart.	10	p. m.	6^h	9′	0″	Emerſ.	2	
—	—	p. m.	7	21	40	—	1	
—	15	p. m.	9	33	0	Immerſ.	3	
—	17	p. m.	8	49	40	Emerſ.	2	
—	17	p. m.	9	19	50	—	1	
—	24	p. m.	6	46	20	Immerſ.	4	
—	—	p. m.	10	10	20	Emerſ.	4.	

Mart.	24	p.	m.	11^h	$16'$	$15''$	Emerſ.	1	
—	—	p.	m.	11	30	10	—	2.	

April.	2	p.	m.	7^h	$44'$	$43''$	Emerſ.	1.	

Nov.	1	a.	m.	2^h	$58'$	$45''$	Immerſ.	1	
—	15	a.	m.	6	45	0	—	1	
—	29	a.	m.	0	45	30	Emerſ.	3.	

Dec.	1	a.	m.	1^h	$12'$	$40''$	Immerſ.	4	obſ. P. Gaubil.
—	—	a.	m.	4	56	0	—	1	
—	—	a.	m.	5	48	0	Emerſ.	4	
—	8	a.	m.	6	45	47	Immerſ.	1	
—	10	a.	m.	1	14	30	—	1	
—	13	a.	m.	5	8	0	—	3	
—	17	a.	m.	3	4	5	—	1	
—	18	p.	m.	9	32	10	—	1	
—	25	p.	m.	11	22	15	—	1	
—	27	a.	m.	1	41	30	—	2	
—	31	a.	m.	6	44	6	—	1.	

Anno 1730.

Jan.	2	a.	m.	1^h	$12'$	$26''$	Immerſ.	1
—	3	a.	m.	4	10	45	—	2
—	9	a.	m.	3	3	45	—	1.

Jan.	10	p.	m.	8^h	46′	30″	Immerſ.	3	
—	13	p.	m.	7	57	15	—	2	
—	17	p.	m.	11	22	30	—	1	
—	18	a.	m.	0	42	0	—	3.	
Febr.	7	p.	m.	7^h	47′	27″	Emerſ.	2	
—	10	a.	m.	1	48	0	—	1	
—	11	p.	m.	8	15	5	—	1	
—	15	p.	m.	8	6	50	—	3	
—	17	a.	m.	3	44	20	—	1	dub.
—	18	p.	m.	10	11	40	—	1	
—	22	a.	m.	0	58	50	—	2	
—	—	p.	m.	6	45	15	Immerſ.	4	
—	—	p.	m.	11	32	0	—	4	jam erat emerſus opinione citius.
—	23	a.	m.	0	5	6	Emerſ.	3	
—	26	a.	m.	0	7	45	—	1	tubo 8 ped.
—	27	p.	m.	6	36	40	—	1	— 14 —
Mart.	1	a.	m.	3^h	36′	20″	Emerſ.	2	tubo 8 ped.
—	6	p.	m.	8	32	30	—	1	— 14 —
—	11	p.	m.	7	33	15	—	2	
—	13	p.	m.	10	29	0	—	1	— 14 —
—	18	p.	m.	10	13	16	—	2	
—	26	a.	m.	0	51	45	—	2	
—	29	p.	m.	8	53	26	—	1	
—	30	p.	m.	8	14	46	—	3.	

April.	5	p.	m.	10^h	$49'$	$55''$	Emerſ.	1	
—	6	p.	m.	8	41	0	Immerſ.	3	
—	12	p.	m.	7	30	48	Emerſ.	2.	

Mart.	12	p.	m.	8^h	$22'$	$0''$	Emerſ.	3	
—	14	p.	m.	9	28	45	—	1	
—	21	p.	m.	10	6	50	—	2.	

Jun.	22	p.	m.	7^h	$55'$	$30''$	Emerſ.	1	dubia nonnihil.

Nov.	4	a.	m.	6^h	$0'$	$0''$	Immerſ.	1	præciſe.
—	13	a.	m.	2	20	0	—	1	
—	20	a.	m.	4	12	0	—	1	
—	22	a.	m.	4	16	30	—	3	
—	26	a.	m.	4	5	30	—	2	
—	27	a.	m.	6	3	0	—	1.	

Dec.	3	a.	m.	6^h	$36'$	$10''$	Immerſ.	2	
—	6	a.	m.	2	22	54	—	1	
—	13	a.	m.	4	11	30	—	1	
—	20	a.	m.	6	0	45	—	1	
—	—	p.	m.	11	28	0	Emerſ.	3	
—	21	a.	m.	0	50	10	Immerſ.	2	
—	—	a.	m.	6	50	45	—	4	
—	22	a.	m.	0	28	0	—	1	
—	27	p.	m.	12	49	0	—	3.	

Dec.	28	a.	m.	3^h	21′	5″	Immerſ.	2	
—	—	a.	m.	3	21	17	Emerſ.	3	
—	29	a.	m.	2	18	10	Immerſ.	1.	

Anno 1731.

Jan.	4	a.	m.	3^h	43′	15″	Immerſ.	3	
—	—	a.	m.	5	49	50	—	2	
—	5	a.	m.	4	8	45	—	1	
—	6	p.	m.	10	35	15	—	1	
—	7	a.	m.	0	38	12	—	4	
—	—	a.	m.	5	6	45	Emerſ.	4	
—	12	a.	m.	5	59	30	Immerſ.	1	
—	14	a.	m.	0	27	10	—	1	
—	—	p.	m.	9	30	45	—	2	
—	21	a.	m.	2	18	0	—	1	P. C. S.
—	23	p.	m.	10	54	0	Emerſ.	4	
—	28	a.	m.	4	10	12	Immerſ.	1	
—	29	a.	m.	2	37	30	—	2	dubia nonnihil.

Febr.	4	a.	m.	6^h	2′	36″	Immerſ.	1	
—	5	a.	m.	5	9	56	—	2	
—	8	p.	m.	11	25	30	—	3	
—	13	a.	m.	2	25	0	—	1	dub.
—	14	p.	m.	8	54	20	—	1	
—	15	p.	m.	8	59	0	—	2	
—	16	a.	m.	3	23	0	—	3.	

Mart.	2	p.	m.	9^{h}	30′	0″	Emerſ.	1	
—	9	p.	m.	6	50	45	—	3	
—	—	p.	m.	11	27	40	—	1	
—	16	p.	m.	10	50	50	—	3	
—	17	a.	m.	1	23	30	—	1	P. G.
—	18	p.	m.	7	52	40	—	1	
—	19	p.	m.	11	29	20	—	2	P. G.
—	24	a.	m.	2	51	50	—	3	P. la Ch. 2.
—	—	a.	m.	2	52	0	—	3	P. G.
—	31	p.	m.	10	43	40	—	4.	
April.	1	p.	m.	11^{h}	45′	20″	Emerſ.	1	
—	14	p.	m.	8	38	0	—	2	
—	17	p.	m.	10	8	40	—	1	
—	20	p.	m.	11	16	0	—	2	
—	21	p.	m.	6	56	20	—	3	P. G.
—	25	a.	m.	0	4	30	—	1	
—	28	p.	m.	7	28	30	Immerſ.	3	
—	—	p.	m.	10	55	30	Emerſ.	3.	
Maji.	3	p.	m.	8^{h}	29′	50″	Emerſ.	1	
—	5	p.	m.	11	30	30	Immerſ.	3.	
Oct.	26	a.	m.	5^{h}	50′	30″	Immerſ.	2.	
Dec.	2	a.	m.	3^{h}	24′	20″	Immerſ.	1.	

Dec.	8	a.	m.	3^h	27′	0″	Emerſ.	4
—	9	a.	m.	5	13	45	Immerſ.	1
—	14	a.	m.	2	48	0	—	3
—	—	a.	m.	5	45	0	Emerſ.	3
—	16	a.	m.	7	4	10	Immerſ.	1
—	21	a.	m.	6	43	30	—	3
—	22	a.	m.	2	17	0	—	2
—	29	a.	m.	4	45	15	—	2.

Anno 1732.

Jan.	1	a.	m.	5^h	11′	40″	Immerſ.	1
—	8	a.	m.	6	59	0	—	1
—	24	a.	m.	5	9	15	—	1
—	30	a.	m.	4	5	15	—	2.

Febr.	2	a.	m.	6^h	13′	15″	Immerſ.	3
—	6	a.	m.	6	36	12	—	2
—	9	a.	m.	3	23	15	—	1
—	16	a.	m.	5	16	50	—	1
—	—	p.	m.	10	26	45	—	2
—	17	p.	m.	11	45	45	—	1
—	24	a.	m.	1	2	15	—	2
—	25	a.	m.	1	40	10	—	1.

Mart.	3	a.	m.	3^h	35′	10″	Immerſ.	1
—	4	p.	m.	10	3	0	—	1
—	11	p.	m.	11	59	0	—	1.

April.	6	p. m.	8^h	53'	0"	Emerſ.	3	
—	12	p. m.	10	57	55	—	1	tubo 10 ped. præclaro excellente.
—	13	p. m.	9	50	30	—	2	— 15.
Maji.	13	a. m.	1^h	6'	20"	Emerſ.	1	tubo 14
—	14	a. m.	7	35	0	—	1	— 14
—	19	p. m.	8	46	45	—	3	— 14
—	23	a. m.	0	0	5	—	2	— 14 horologium correctum ex culm. α ♏ 0^h 11' 48".
—	26	p. m.	10	10	30	Immerſ.	3.	
Jun.	6	p. m.	7^h	50'	0"	Emerſ.	1	
—	13	p. m.	9	43	40	—	1	
—	16	p. m.	9	1	18	—	2	tubo 14
—	29	p. m.	7	58	25	—	1	— 14.
Jul.	1	p. m.	8^h	29'	30"	Emerſ.	3	
—	8	p. m.	9	59	30	Immerſ.	3.	
Nov.	11	a. m.	6^h	16'	50"	Immerſ.	1	ſcilicet 7' 50" poſt culm. Cordis Hydræ.
—	29	a. m.	5	47	0	—	3.	

Dec. 27 a. m. 6^h 14′ 30″ Immerſ. 1.

Anno 1733.

Jan.	11	a. m.	5^h	13′	10″	Immerſ.	3	tubo	20 ped.
—	12	a. m.	4	23	10	—	1	—	14
—	19	a. m.	6	13	50	—	1	—	11 & 14.
Febr.	11	a. m.	6^h	16′	45″	Immerſ.	1		
—	27	a. m.	4	33	50	—	1.		
Mart.	22	a. m.	4^h	48′	15″	Immerſ.	1	tubo	14
—	31	a. m.	1	14	0	—	1	—	20
—	—	a. m.	2	56	0	Emerſ.	3	—	20.
April.	7	a. m.	3^h	6′	30″	Immerſ.	1	—	20.
Maji.	10	p. m.	8^h	27′	30″	Emerſ.	1	tubo	20
—	16	p. m.	10	41	10	—	2	—	20
—	17	p. m.	10	21	0	—	1	—	20
—	25	a. m.	0	15	20	—	1	—	20.
Jun.	2	p. m.	8^h	37′	0″	Emerſ.	1	tubo	14
—	25	p. m.	8	45	0	Emerſ.	1	—	14.

Anno 1734.

Febr. 23 a. m. $5^h\ 37'\ 50''$ Immerſ. I tubo 20 ped.

Mart. 27 a. m. $2^h\ 14'\ 15''$ Immerſ. I tubo 14 ped.

Maji. 29 p. m. $9^h\ 37'\ 0''$ Emerſ. I tubo 13 ped.

Jun. 5 p. m. $11^h\ 30'\ 0''$ Emerſ. I
— 28 p. m. 11 37 0 — I tubo 8 ped.

Jul. 7 p. m. $7^h\ 58'\ 18''$ Emerſ. I tubo 14 ped.

Aug. 6 p. m. $10^h\ 7'\ 45''$ Emerſ. I tubo 20 ped.

Sept. 7 p. m. $6^h\ 55'\ 0''$ Emerſ. I tubo 20 ped.

Anno 1735.

Mart. 7 a. m. $5^h\ 5'\ 45''$ Immerſ. I tubo 14 ped.
— 30 a. m. 5 20 18 — I — 14.

Maji.	24	a.	m.	2^h	3′	50″	Immerſ.	1	tubo	20 ped.
—	31	a.	m.	3	57	10	—	1	—	20.
Jul.	3	p.	m.	9^h	8′	30″	Immerſ.	1	tubo	20 ped.
—	10	p.	m.	11	0	30	—	1	—	20.
Sept.	19	p.	m.	6^h	22′	0″	Immerſ.	1	tubo	14 dub.
—	26	p.	m.	8	20	55	—	1	—	14.
Oct.	11	p.	m.	7^h	3′	0″	Immerſ.	2	tubo	8
—	19	p.	m.	8	42	0	—	1	—	14 dub.
—	25	p.	m.	6	15	16	—	3	—	18 P. G.

Anno 1736.

Jul.	4	a.	m.	3^h	40′	0″	Immerſ.	1		
—	13	a.	m.	0	2	05	—	1	tubo	13
—	28	p.	m.	10	14	30	—	1	d.	
—	29	a.	m.	2	55	0	—	2.		
Aug.	21	a.	m.	0^h	47′	30″	Immerſ.	1	tubo	13
—	29	p.	m.	9	13	95	Emerſ.	1.		
Sept.	9	p.	m.	9^h	14′	10″	Emerſ.	9	tubo	14.

Sept. 21

Sept.	21	p. m.	9^h	36′	12″	Emerſ.	1	P. G.
—	28	p. m.	11	32	52	—	1	tubo 9 pedum.
Oct.	7	p. m.	7^h	58′	50″	Emerſ.	1	tubo 20 pedum.
—	11	p. m.	9	10	15	—	2	— 20
—	14	p. m.	9	56	50	—	1	— 8
—	30	p. m.	8	19	0	—	1	dub.
Nov.	6	p. m.	10^h	16″	0″	Emerſ.	1	dub.
—	15	p. m.	6	16	28	Immerſ.	3	— 20 pedum.
—	—	p. m.	6	38	32	Emerſ.	1	— 20.
Dec.	1	p. m.	4^h	54′	15″	Emerſ.	1	tubo 14 pedum.
—	7	p. m.	5	55	0	—	2	— 14
—	8	p. m.	6	46	47	—	1	— 14.

Anno 1737.

Jul.	9	a. m.	1^h	35′	30″	Immerſ.	1	dub. 8 pedum.
Sept.	17	p. m.	10^h	52′	30″	Emerſ.	4	tubo 8 pedum.
—	—	p. m.	11	1	45	—	1	
—	18	a. m.	2	0	15	—	2	
—	25	a. m.	0	57	30	—	1	— 8
—	26	p. m.	7	28	10	—	1	— 14.

Oct.	3	p. m.	9^h	25′	50″	Emerſ.	1			
—	12	p. m.	5	51	30	—	1	tubo	14	pedum.
—	—	p. m.	11	20	0	—	2	dub.		
—	18	p. m.	6	14	45	—	3	—	20	
—	25	p. m.	7	12	35	Immerſ.	3	—	20	
—	26	p. m.	9	43	20	Emerſ.	1	—	8	dub.
—	30	p. m.	5	56	42	—	2.			

Nov.	1	p. m.	11^h	16′	20″	Immerſ.	3			
—	2	p. m.	11	39	40	Emerſ.	1	tubo	8	pedum.
—	4	p. m.	6	7	48	—	1	—	14	
—	6	p. m.	8	34	15	—	2	—	14	
—	13	p. m.	11	12	10	—	2	—	8	
—	18	p. m.	9	56	40	—	1	—	8	
—	23	p. m.	8	52	0	Immerſ.	4			
—	30	p. m.	6	19	15	Emerſ.	3.			

Dec.	4	p. m.	8^h	11′	40″	Emerſ.	1	tubo	20	pedum.
—	7	p. m.	7	20	30	Immerſ.	3	—	8	
—	—	p. m.	10	19	30	Emerſ.	3	—	8	
—	8	p. m.	8	15	40	—	2	—	8	
—	10	p. m.	5	57	0	—	4	—	20	
—	11	p. m.	10	3	15	—	1	—	8	
—	20	p. m.	6	25	10	—	1	—	8	
—	27	p. m.	8	17	45	—	1	—	8.	

Anno 1738.

Jan.	9	p.	m.	7^h	46′	32″	Emerſ.	2	tubo	20	pedum.
—	19	p.	m.	7	16	40	Immerſ.	3.			
Febr.	4	p.	m.	6^h	41′	30″	Emerſ.	1	tubo	13	admod. dub.
Jul.	18	a.	m.	2^h	35′	0″	Emerſ.	3	tubo	8	pedum.
—	21	a.	m.	1	34	30	Immerſ.	1	dub.	8.	
Aug.	22	p.	m.	10^h	39′	0″	Emerſ.	3	tubo	8	pedum.
—	25	a.	m.	2	11	0	Immerſ.	2	—	8.	
Sept.	6	a.	m.	2^h	31′	0″	Immerſ.	3			
—	11	p.	m.	10	49	2	—	2	tubo	8	pedum.
—	12	a.	m.	4	0	30	—	1	—	8	
—	13	p.	m.	10	29	26	—	1	—	18	
—	29	p.	m.	8	52	32	—	1	—	18.	
Oct.	6	p.	m.	8^h	10′	5″	Immerſ.	2	tubo	18	pedum.
—	—	p.	m.	10	48	10	—	1	—	18	
—	30	a.	m.	1	20	50	—	1	dub.	18	
—	31	p.	m.	7	41	8	Emerſ.	1	—	18	
—	—	p.	m.	8	2	10	—	2	—	18.	

Nov.	6	a.	m.	3h	6′	56″	Emerſ.	1	tubo	10	pedum.
—	14	p.	m.	11	30	40	—	1	—	10	
—	15	a.	m.	1	16	30	—	2	—	10	
—	16	p.	m.	5	59	55	—	1	—	14	
—	—	—	—	8	53	5	Immerſ.	3			
—	—	—	—	11	0	35	Emerſ.	3			
—	22	a.	m.	1	23	45	—	1			
—	23	p.	m.	7	51	50	—	1	—	10	
—	30	p.	m.	9	45	35	—	1	—	10.	

Dec.	2	p.	m.	7h	47′	0″	Emerſ.	2	tubo	10	pedum.
—	7	p.	m.	11	35	15	—	1	—	10	
—	22	p.	m.	5	56	3	Immerſ.	3	—	18	non latuit 2h
			nam	6	56	0	jam pleno lumine fulgebat.				
—	23	p.	m.	9	49	30	Emerſ.	1	tubo	8	ſubdub.
—	29	p.	m.	8	56	15	Immerſ.	3	—	8	
—	—	p.	m.	10	50	50	Emerſ.	3	—	8	
—	30	p.	m.	11	41	0	—	1	—	8.	

Anno 1739.

Jan.	1	p.	m.	6h	9′	8″	Emerſ.	1	tubo	14	pedum.
—	3	p.	m.	7	26	24	—	2	—	18	
—	8	p.	m.	8	1	38	—	1	—	10	
—	10	p.	m.	10	3	25	—	2	—	18	
—	15	p.	m.	9	55	15	—	1	—	18	
—	24	p.	m.	6	15	20	—	1	—	10	
—	31	p.	m.	8	10	45	—	1	dub.	10.	

Mart.	8	p.	m.	6ʰ	58′	30″	Emerſ.	2	tubo	18	pedum.	
—	18	p.	m.	7	9	0	—	3	—	20.		

Sept.	1	a.	m.	3ʰ	42′	20″	Immerſ.	1	tubo	8	pedum.	
—	12	a.	m.	0	7	50	—	1	—	13		
—	13	p.	m.	11	38	45	Emerſ.	3	—	13		
—	17	a.	m.	2	3	54	Immerſ.	1	—	13		
—	21	a.	m.	3	43	30	Emerſ.	3	—	17		
—	24	a.	m.	4	0	4	Immerſ.	1	—	13		
—	25	p.	m.	10	29	0	—	1	—	13		
—	28	a.	m.	5	54	18	—	3	—	13.		

Oct.	1	a.	m.	5ʰ	56′	3″	Immerſ.	1	tubo	13	pedum.
—	3	a.	m.	0	26	4	—	1	—	13	
—	11	p.	m.	8	50	11	—	1	—	13	dub.
—	15	a.	m.	1	7	47	—	2	—	13	
—	18	p.	m.	10	46	35	—	1	—	20	
—	26	p.	m.	10	0	55	—	3	—	20	
—	—	p.	m.	11	51	45	Emerſ.	3	—	20	
—	29	p.	m.	6	20	12	Immerſ.	2.			

Nov.	1	p.	m.	7ʰ	40′	30″	Immerſ.	2	tubo	13	pedum.
—	2	a.	m.	2	36	0	—	1	dub.	13	
—	3	p.	m.	9	3	30	—	1	—	13	
—	8	p.	m.	10	17	40	—	2	—	13	
—	10	a.	m.	2	59	38	—	3	—	18	
—	—	p.	m.	10	57	32	—	1	—	18.	

Nov.	16	a.	m.	0^h	53′	30″	Immerſ.	2	dub.	13	pedum.
—	18	a.	m.	0	50	45	—	1	—	13	
—	26	p.	m.	7	16	33	Emerſ.	2	—	18	
—	—	p.	m.	11	21	20	—	1	—	18	
—	28	p.	m.	5	52	18	—	1	—	20.	

Dec.	1	p.	m.	7^h	56′	20″	Emerſ.	3	dub.	18	pedum.
—	3	p.	m.	9	48	53	—	2	—	10	
—	4	a.	m.	1	12	38	—	1	—	18	
—	5	p.	m.	7	40	11	—	1	—	18	dub.
—	11	a.	m.	0	23	30	—	2	dub.	13	
—	—	a.	m.	3	3	50	—	1	—	18	
—	12	p.	m.	9	31	55	—	1	—	18	
—	16	a.	m.	3	51	0	—	3	—	13	
—	19	p.	m.	11	23	25	—	1	—	13	
—	21	p.	m.	5	50	44	—	1	—	13	
—	28	p.	m.	7	42	10	—	1	—	13.	

Anno 1740.

Jan.	4	p.	m.	9^h	26′	30″	Emerſ.	2	dub.	13	pedum.
—	—	p.	m.	9	33	20	—	1	—	13	
—	11	p.	m.	11	25	14	—	1	—	13	
—	—	p.	m.	11	58	58	—	2	—	13	
—	13	p.	m.	5	39	50	Immerſ.	3	—	20	
—	—	p.	m.	5	53	15	Emerſ.	1	—	20	
—	—	p.	m.	7	40	30	—	3	—	20	
—	20	p.	m.	7	46	34	—	1	—	13	P. G. habet $7^h 47' 15''$.

Jan..	20	p.	m.	9^h	38′	54″	Immerſ.	3	tubo	13	P. G. habet 9^h 35′ 45″.
—	—	p.	m.	11	4	5	Emerſ.	3	—	13	
—	29	p.	m.	6	32	5	—	2	P. G.		
Febr.	3	p.	m.	11^h	34′	27″	Emerſ.	1	tubo	13	pedum.
—	5	p.	m.	6	2	50	—	1	—	13	
—	12	p.	m.	7	57	25	—	1	—	13	
—	—	p.	m.	11	48	45	—	2	dub.		
—	19	p.	m.	9	53	43	—	1	tubo	13	
—	25	p.	m.	5	37	3	Immerſ.	3	—	13	
—	—	p.	m.	7	45	56	Emerſ.	3	—	13	
—	28	p.	m.	6	18	22	—	1	—	13.	
Mart.	1	p.	m.	6^h	28′	0″	Emerſ.	2	tubo	13	pedum.
—	3	p.	m.	9	42	38	Immerſ.	3	—	13	
—	6	p.	m.	8	15	54	Emerſ.	1	—	13	
—	13	p.	m.	10	13	56	—	1	—	13	
—	29	p.	m.	8	38	30	—	1	—	10.	
April.	8	p.	m.	8^h	14′	0″	Emerſ.	3	tubo	8.	pedum.
Aug.	27	a.	m.	5^h	9′	0″	Immerſ.	1	tubo	13.	
Oct.	12	a.	m.	4^h	43′	11″	Emerſ.	3	tubo	13	pedum.
—	—	a.	m.	5	42	46	Immerſ.	1	—	13.	

Oct.	15	a.	m.	3^h	13′	13″	Immerſ.	2	tubo	13	pedum.
—	19	a.	m.	6	0	15	—	3	—	13	
—	22	a.	m.	5	49	22	—	2	—	13.	

Nov. *	4	a.	m.	5^h	55′	14″	Immerſ.	1	tubo	13	pedum.
—	9	a.	m.	0	16	5	—	2	—	13	
—	13	a.	m.	2	16	52	—	1	—	13	
—	16	a.	m.	2	49	24	—	2	—	13	
—	20	a.	m.	4	9	10	—	1	—	13	
—	21	p.	m.	10	37	33	—	1	—	13	
—	23	a.	m.	5	21	48	—	2	—	13	
—	27	a.	m.	6	1	25	—	1	—	13.	

Dec.	1	a.	m.	5^h	47′	40″	Immerſ.	3	tubo	13	pedum.
—	3	p.	m.	9	10	57	—	2	—	20	
—	10	p.	m.	11	42	32	—	2	—	10	
—	14	p.	m.	10	38	20	—	1	—	10	
—	18	a.	m.	2	15	20	—	2	—	10	
—	20	a.	m.	6	3	0	—	1.			

Anno 1741.

Jan.	1	p.	m.	5^h	30′	6″	Emerſ.	1	tubo	10	pedum.
—	7	a.	m.	0	52	25	—	1	—	18	
—	8	p.	m.	7	20	30	—	1	dub.	18	
—	12	a.	m.	1	51	22	—	2	tubo	10	
—	14	a.	m.	2	44	40	—	1	—	18.	

Jan.	15	p. m.	9^{h}	12′	36″	Emerſ.	1	tubo	13	pedum.
—	19	a. m.	4	26	15	—	2	—	10	
—	22	p. m.	5	41	57	—	2	—	18	
—	24	p. m.	5	33	24	—	1	—	10	
—	29	p. m.	8	18	16	—	2	—	13	
—	30	a. m.	0	57	10	—	1	—	8.	

Febr.	3	p. m.	8^{h}	18′	0″	Emerſ.	3	circiter		
—	5	p. m.	10	53	20	—	2	tubo	9	pedum.
—	6	a. m.	2	53	0	—	1	—	9	ſubdub.
—	7	p. m.	9	20	35	—	1.			
—	8	p. m.				Paulo ante h. 6 de 4^{e} quaſi ſimul prodierunt 1^{mus} & 4^{tus} Satelles, ille ex facie, hic a tergo; tum				
			10	43	0	tandem plene immerſus eſt in umbram 4^{tus}, & pluries ante velut diſparens, ac denuo refulgens.				
—	9	a. m.	2	6	30	cœpit 4^{tus} ex umbra emergere.				
—	10	p. m.	9	16	30	Immerſ.	3			
—	13	a. m.	1	32	0	Emerſ.	2	tubo	9	pedum.
—	14	p. m.	11	14	15	—	1	—	18	
—	16	p. m.	5	43	45	—	1	—	18	
—	23	p. m.	7	39	29	—	1	—	18	
—	26	p. m.	8	26	30	—	4	—	13.	

Mart.	2	p. m.	9^{h}	36′	11″	Emerſ.	1	tubo	13	pedum.
—	11	p. m.	6	2	45	—	1	—	13.	

April.	3	p. m.	6h	26′	35″	Emerſ.	1	tubo	13	pedum.
—	—	p. m.	8	14	0	—	2	—	9	ſubdub.
—	10	p. m.	8	20	37	—	1	—	13.	
Maji.	3	p. m.	8h	40′	6″	Emerſ.	1	tubo	13	pedum.
Sept.	8	a. m.	4h	41′	48″	Immerſ.	1	tubo	13	pedum.
Oct.	1	a. m.	5h	0′	8″	Immerſ.	1	tubo	13	pedum.
—	2	a. m.				paulo poſt h. 3 ſtabat ♃ penitus ſolitarius, ſine ullo Satellite.				
—	16	a. m.	5	8	45	Immerſ.	2	tubo	13	pedum.
—	24	a. m.	5	14	40	—	1	—	13.	
Nov.	10	a. m.	1h	59′	55″	Immerſ.	2	tubo	8	pedum.
—	—	a. m.	5	13	2	—	3	—	13	
—	17	a. m.	4	37	1	—	2.			
Dec.	10	p. m.	11h	52′	50″	Immerſ.	1	tubo	8	pedum.

Anno 1742.

Jan.	2	p. m.	11h	51′	55″	Immerſ.	1	tubo	9	pedum.
—	11	p. m.	8	9	45	—	1	—	13	
—	20	p. m.	8	30	15	—	3.			

Febr.	12	p.	m.	6^h	$56'$	$55''$	Emerſ.	1	tubo	13 pedum.
—	18	a.	m.	2	21	20	—	1	—	8
—	19	p.	m.	8	49	25	—	1	—	13
—	26	p.	m.	10	47	0	—	1	—	8.

Nov.	11	a.	m.	3^h	$44'$	$0''$	Immerſ.	2	tubo	9 tardius $9'$ m. quam ex novis Tabulis Caſſianis calculus prædixerat.
—	12	a.	m.	6	30	0	Immerſ.	1	tubo	12.

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—	——	—	17	—	—	ϑ ♒	—	—
—	——	Dec.	29	—	—	π ♌	—	—
—	1731	Jan.	17	—	—	Plejades	—	86
—	——	Mart.	20	—	—	π ♌	—	—
—	——	April.	16	—	—	ο ♌	—	87
—	——	Nov.	9	—	—	χ ♓	—	—
—	——	—	16	—	—	H ♊	—	—
—	——	—	17	—	—	μ ♊	—	88
—	——	—	24	—	—	ε ♌	—	—
—	——	Dec.	21	—	—	ε ♌	—	—

Ann.	1732	Febr.	3	Luna	occultavit	ζ ♈	pag.	88
—	——	—	6	—	—	H ♊	—	89
—	——	—	7	—	—	η ♊	—	—
—	——	Mart.	2	—	—	* ♉	—	—
—	——	Jul.	1	—	—	e. ♌	—	—
—	——	Jul.	7	—	—	o ♐	—	90
—	——	Aug.	31	—	—	π ♐	—	—
—	——	Sept.	24	—	—	δ ♏	—	—
—	——	Oct.	2	—	—	κ ♓	—	—
—	1733	—	14	—	—	* ♐	—	91
—	——	—	15	—	—	d ♐	—	—
					& alias 2	* ♐	—	—
—	——	—	27	—	—	χ Orionis	—	92
—	——	Nov.	27	—	—	ω ♌	—	—
—	——	Dec.	10	—	—	* * ♑	—	—
—	——	—	16	—	—	π ♓	—	—
—	1734	Febr.	13	—	—	χ Orionis	—	93
—	——	—	25	—	—	λ ♎	—	—
—	——	Jul.	15	—	—	♃^{em}	—	—
—	——	Oct.	5	—	—	ρ. ♐	—	94
—	——	Dec.	21	—	—	α ♎	—	—
—	1735	Jan.	2	—	—	ε ♓	—	95
—	——	Mart.	5	—	—	λ ♊	—	—
—	——	—	28	—	—	* ♉	—	—
—	1736	Jan.	24	—	—	π ♊	—	96
—	——	April.	20	—	—	π ♌	—	—
—	——	Sept.	26	—	—	α ♉	—	—
—	——	—	29	—	—	λ ♊	—	—
—	——	Dec.	6	—	—	τ ♑	—	97
—	——	—	16	—	—	* ♉	—	—

Ann.	1737	Febr.	3	Luna	occultavit	♀^{em}	pag.	98
—	——	—	9	—	—	α ♉	—	—
—	——	—	16	—	—	τ ♌	—	—
—	——	April.	10	—	—	ξ ♌	—	99
—	——	—	12	—	—	τ ♌	—	—
—	——	Sept.	13	—	—	ξ Ceti	—	—
—	——	—	16	—	—	α ♉	—	—
—	——	Oct.	13	—	—	γ ♉	—	100
—	——	Nov.	2	—	—	♃^{em}	—	—
—	——	Dec.	3	—	—	ξ Ceti	—	101
—	——	—	6	—	—	α ♉	—	—
—	1738	Febr.	26	—	—	θ ♉	—	—
—	——	Maji.	1	—	—	γ ♍	—	102
—	——	Nov.	26	—	—	α ♉	—	—
—	1739	Aug.	18	—	—	δ ♑	—	—
—	——	Sept.	16	—	—	ψ ♒	—	103
					& aliam	* ♒	—	—
—	——	Nov.	8	—	—	γ ♑	—	—
					item	δ ♑	—	—
—	1740	Oct.	12	—	—	♃^{em}	—	—
—	——	—	31	—	—	* * Ceti	—	104
—	——	Nov.	10	—	—	♂^{em}	—	—
—	——	Dec.	5	—	—	η ♊	—	105
—	1741	Febr.	22	—	—	ε ♉	—	—
—	——	—	25	—	—	μ ♊	—	—
—	——	April.	20	—	—	♃^{em}	—	—
—	——	Sept.	24	—	—	* Ceti	—	106
—	——	—	17	—	—	ν ♓	—	—
—	1742	Jan.	14	—	—	ξ Ceti	—	—
—	——	Mart.	13	—	—	* ♉	—	—

Ann.	1743	Nov.	3	Luna	occultavit	A ♉	pag.	107
—	1744	April.	24	—	—	♃^{em}	—	—
—	1745	Mart.	7	—	—	♀^{em}	—	—

CAPUT III.

CONGRESSUS LUNAE CUM STELLIS CITRA OCCULTATIONEM.

Ann.	1718	Febr.	9	Luna	cum	Hyadibus	pag.	108
—	——	—	12	—	—	* ♊	—	—
—	——	Mart.	5	—	—	* * ♓	—	—
—	——	—	7	—	—	* * *	—	109
—	——	—	19	—	—	α ♍	—	—
—	——	Jul.	9	—	—	η Ophiuchi	—	—
—	——	Aug.	9	—	—	* ♐	—	110
—	1719	Febr.	23	—	—	μ ♓	—	—
—	——	—	24	—	—	ξ Ceti	—	—
—	——	Mart.	31	—	—	α ♌	—	111
—	——	April.	6	—	—	κ ♍	—	—
—	——	Jun.	28	—	—	α ♏	—	—
—	——	Jul.	20	—	—	♀^{e}	—	—
—	——	—	21	—	—	β ♍	—	—
—	——	Sept.	18	—	—	ϑ ♎	—	—
—	——	—	28	—	—	* Ceti	—	112
—	——	Oct.	10	—	—	α & A ♌	—	—
—	——	—	20	—	—	β ♐	—	—
—	——	—	22	—	—	ι ♒	—	—

Ann.	1719	Oct.	23	Luna cum λ ♒	pag.	112
—	——	—	31	— — α ♉	—	113
				& cum Hyadibus occult.	—	—
—	——	Nov.	9	— occult. γ ♍	—	—
—	——	—	23	occult. μ ♓	—	114
—	1720	Febr.	14	— — ξ Ceti	—	—
—	——	—	26	— — ♃	—	—
—	——	—	28	— — κ ♍	—	—
—	——	Mart.	12 & 15	occult. α ♉	—	115
—	——	—	24	— — γ ♍	—	—
—	——	Maji.	18	— — γ ♍	—	116
—	——	Oct.	8	occult. ο & π ♐	—	—
—	——	—	19	— — Hyadibus	—	—
—	——	—	20	— — α ♉	—	117
—	——	Nov.	17	— — * Orionis	—	—
—	——	Dec.	15	— — ι ♊	—	—
—	1721	Jan.	23	— — ϑ ♎	—	—
—	——	Mart.	7	— — ν ♎	—	118
—	——	—	8	— — ζ ♊	—	—
—	——	April.	1	— — δ ♉	—	—
—	——	—	6	— — δ ♋	—	—
—	——	Sept.	10	— — ξ Ceti	—	119
—	——	Oct.	31	— — * Ceti	—	—
—	——	Nov.	6	— — δ & ε ♉	—	—
—	1722	Jan.	24	— — μ Ceti	—	—
—	——	—	25	— — *f* ♉	—	120
—	——	—	26	— — δ ♉	—	—
—	——	—	28	— — H ♊	—	—
—	——	Febr.	20	— — ξ Ceti	—	—
—	——	Mart.	9	— — ϑ ♎.	—	121

Ann.	1722	April.	6	Luna	cum	♃ve	pag.	121
—	——	—	7	—	—	♄	—	—
—	——	Jun.	15	—	—	♀	—	—
—	——	—	26	—	—	β ♏	—	122
—	——	Jul.	2	—	—	ε ♑	—	—
—	——	Sept.	16	—	—	β ♏	—	—
—	——	Sept.	17	—	—	♄	—	—
—	——	Nov.	12	—	—	λ ♐	—	—
—	——	Dec.	7	—	—	☿	—	123
—	——	—	17	—	—	ν ♓	—	—
—	——	—	20	—	—	ε ♉	—	—
—	1723	Febr.	19	—	—	η ♌	—	—
—	——	Mart.	2	—	—	λ ♐	—	124
—	——	—	13	—	—	ο ♉	—	—
—	——	Jun.	16	—	—	β & α ♏	—	—
—	1724	Aug.	2	—	—	τ ♐	—	125
—	——	Nov.	3	occult.		υ ♉	—	—
—	——	—	30	—	—	τ ♉	—	—
—	——	Dec.	12	—	—	α ♎	—	—
—	——	—	27	—	—	A ♉	—	126
—	1725	Jan.	7	—	—	*m* ♍	—	—
—	——	Febr.	15	—	—	* Ceti	—	—
—	——	Mart.	19	—	—	κ & υ ♉	—	—
—	——	April.	21	—	—	η ♌	—	—
—	——	—	25	—	—	θ ♍	—	127
—	——	Jun.	23	—	—	δ ♏	—	—
—	——	Aug.	28	—	—	ο ♓	—	—
—	——	Sept.	20	—	—	τ ♒	—	—
—	——	Oct.	18	—	—	ψ ♒	—	—
—	——	Dec.	23	—	—	♂	—	128

Ann.	1726	Jan.	7	Luna	cum	*f* ♒	pag.	128
—	——	—	8	—	—	ψ ♒	—	129
—	——	—	13	—	—	δ ♈	—	—
—	——	—	17	—	—	υ ♊	—	—
—	——	—	19	arctiſſime		♂	—	—
—	——	Febr.	19	—	—	η ♍	—	130
—	——	—	24	—	—	α ♏	—	—
—	——	Mart.	11	—	—	* Aurigæ	—	131
—	——	Jun.	9	—	—	α ♍	—	—
—	——	Sept.	2	—	—	π ♏	—	—
—	——	—	30	—	—	α ♏	—	132
—	——	Oct.	2	—	—	δ ♐	—	—
—	——	—	23	—	—	η ♍	—	—
—	——	Nov.	7	—	—	♃	—	—
—	——	Dec.	18	—	—	α ♍	—	133
—	1727	Mart.	1 & 2		—	β ♉	—	—
—	——	—	3	—	—	ι ♊	—	134
—	——	—	4	—	—	υ ♊	—	—
—	——	—	5	—	—	γ ♋	—	135
—	——	—	7	—	—	σ ♌	—	—
—	——	—	15	—	—	γ ♐	—	136
—	——	—	16	—	—	ζ ♐	—	—
—	——	—	17	—	—	ω ♐	—	—
—	——	Maji.	4	—	—	α ♍	—	137
—	——	Jul.	2	—	—	δ ♐	—	—
—	——	Sept.	8	—	—	φ & χ ♉	—	138
—	——	—	9	—	—	β ♉	—	—
—	——	Oct.	20	—	—	τ ♐	—	—
—	——	—	21	—	—	ω ♐	—	139
—	——	Nov.	20	—	—	ι ♒	—	—

Ann.	1727	Nov.	24	Luna	cum	ε ♓	pag.	139
—	——	Dec.	21	—	—	δ ♓	—	140
—	1728	Jan.	1	—	—	α ♌	—	—
—	——	—	8	—	—	α ♏	—	141
—	——	—	23	—	—	β ♉	—	—
—	——	—	28	—	—	ρ ♌	—	142
—	——	Febr.	24	—	—	α ♌	—	—
—	——	April.	14	—	—	β ♉	—	—
—	——	—	19	—	—	α ♌	—	143
—	——	Maji.	23	—	—	α ♏	—	144
—	——	—	24	—	—	α ♏	—	—
—	——	Jul.	22	—	—	γ ♑	—	145
—	——	Aug.	29	—	—	β ♉	—	—
—	——	Oct.	12	—	—	γ ♑	—	—
—	——	—	13	—	—	σ ♒	—	—
—	——	Dec.	6	—	—	♄	—	146
—	1729	Nov.	23	—	—	φ ♐	—	—
—	1730	Mart.	28	—	—	♃	—	—
—	——	Jul.	25	—	—	α ♏	—	147
—	1731	Sept.	14	—	—	ϑ ♒	—	—
—	——	Oct.	8	—	—	* ♐	—	—
—	1732	Maji.	7	—	—	α ♍	—	148
—	——	Aug.	31	—	—	ο & π ♐	—	—
—	——	Dec.	20	—	—	τ ♑	—	—
—	1733	Jan.	27	—	—	α Sirii	—	—
—	——	—	28	—	—	α Procyonis	—	149
—	——	Sept.	14	—	—	ω ♏	—	—
—	1734	Maji.	18	—	—	♃	—	—
—	——	Jul.	17	—	—	β ♑	—	—
—	——	Oct.	7	—	—	♂	—	150

Ann.	1734	Oct.	8	Luna cum	✱ Pegaſi	pag.	150
—	——	Nov.	22	— —	α ♍	—	—
—	——	Dec.	13	— —	α Procyon.	—	—
—	1235	Febr.	4	— —	α ♊	—	—
—	——	—	12	— —	α ♍	—	151
—	——	—	13	— —	λ ♍	—	—
—	——	—	14	— —	β ♎	—	152
—	——	—	15	— —	β ♏	—	—
—	——	Mart.	19	— —	ε ♐	—	—
—	——	April.	27	occult.	γ ♊	—	—
—	——	Maji.	6	— —	α ♎	—	—
—	——	Dec.	11	— —	♀	—	153
—	——	—	27	— —	α ♉	—	154
—	1736	Jan.	9	— —	♀	—	155
—	——	April.	19	— —	α ♋	—	—
—	——	Oct.	23	— —	γ ♉	—	—
—	1737	Febr.	6	— —	ξ Ceti	—	—
—	——	Mart.	8	— —	γ ♉	—	—
—	——	Nov.	16	— —	A ♌	—	156
—	——	Dec.	3	— —	ξ Ceti	—	—
—	——	—	27	— —	♃	—	—
—	1738	Jan.	2	— —	γ ♉	—	157
—	——	Febr.	7	— —	ϰ ♌	—	—
—	——	Nov.	15	— —	π ♐	—	—
—	——	—	18	— —	ι ♒	—	—
—	1739	Sept.	16	— —	ψ ♒	—	—
—	——	Oct.	17	— —	ξ Ceti	—	158
—	——	Dec.	13	— —	δ ♉	—	—
—	——	—	17	— —	♄	—	—
—	1740	Mart.	2	— —	μ Ceti	—	159

Ann.	1740	Sept.	9	Luna	cum	μ Ceti	pag.	16
—	——	Nov.	26	—	—	τ ♒	—	—
—	——	Dec.	3	—	—	ε ♉	—	—
—	1741	Jan.	1	—	—	♃	—	—
—	——	Febr.	24	—	—	η ♊	—	16

CAPUT IV.

CONGRESSUS PLANETARUM MINORUM.

Ann.	1718	Sept.	18	♃	cum	♀	pag.	16
—	——	Oct.	17	♂	—	♀	—	—
—	——	Nov.	16	♄	—	♀	—	—
—	1719	Jul.	15	♃	—	♀	—	16
—	1720	Oct.	27	♃	—	♂	—	—
—	1721	Dec.	13	♃	—	♀	—	—
—	1722	Jan.	4	♀	—	☿	—	16
—	1723	Jan.	1	♄	—	♃	—	16
—	1725	Jan.	20	♃	—	☿	—	—
—	——	Febr.	9	♄	—	♀	—	16
—	——	Mart.	10	♀	—	☿	—	—
—	——	—	16	♃	—	♀	—	—
—	——	—	—	♀	—	☿	—	—
—	——	—	—	♂	—	☿	—	—
—	——	Aug.	18	♀	—	☿	—	—
—	1726	Jan.	19	♃	—	♀	—	—
—	——	Maji.	18	♃	—	♀	—	16
—	1727	April.	3	♃	—	♀	—	—

Ann.	1727	April.	3	♀	cum	☿	pag.	167
—	——	—	9	♃	—	♀	—	—
—	1728	Mart.	22	♄	—	♀	—	168
—	——	Dec.	15	♂	—	♀	—	—
—	1729	Jan.	6	♄	—	♀	—	—
—	——	—	28	♄	—	♂	—	—
—	——	Aug.	25	♃	—	♂	—	—
—	1731	Maji.	4	♄	—	♀	—	—
—	——	Nov.	20	♃	—	♂	—	169
—	1732	Jan.	3	♀	—	☿	—	—
—	——	Oct.	30	♃	—	☿	—	170
—	1733	Oct.	6	♃	—	♀	—	—
—	1734	Febr.	8	♃	—	♂	—	—
—	1735	Jan.	10	♃	—	☿	—	171
—	——	Maji.	27	♂	—	♀	—	—
—	——	Nov.	28	♂	—	♀	—	—
—	1736	Jan.	20	♂	—	♀	—	172
—	——	Febr.	19	♃	—	♂	—	—
—	——	Mart.	9	♃	—	♀	—	—
—	——	April.	19	♃	—	♂	—	173
—	1737	Jan.	6	♃	—	♀	—	—
—	——	—	31	♃	—	☿	—	174
—	——	Mart.	15	♄	—	♂	—	—
—	——	Maji.	26	♀	—	☿	—	175
—	——	Jun.	1	♀	—	☿	—	—
—	——	Dec.	22	♂	—	♀	—	—
—	1738	Jun.	30	♃	—	♂	—	176
—	1740	Sept.	22	♃	—	♂	—	—
—	1742	Sept.	20	♄	—	♃	—	177
—	——	—	—	♃	—	♀	—	—

Ann.	1744	Dec.	31	♄ cum	♂	pag.	177
—	1745	Mart.	29	♄ —	♂	—	178

CAPUT V.

CONGRESSUS PLANETARUM MINORUM CUM STELLIS FIXIS.

§. I.

SATURNUS CUM FIXIS.

Ann.	1718	Jan.	31	♄ cum	κ ♍	pag.	179
—	——	April.	14	—	α ♍	—	180
—	1719	Maji.	1	—	α ♎	—	—
—	——	Sept.	19	—	μ ♎	—	181
—	1720	Febr.	29	—	ϑ ♎	—	—
—	——	Maji.	23	—	ζ ♎	—	—
—	——	Dec.	10	—	ν ♏	—	182
—	1721	Jan.	1	—	ψ Ophiuchi	—	183
—	——	Jun.	22	—	ν ♏	—	—
—	——	Jul.	25	—	β ♏	—	184
—	1722	Febr.	2	—	ρ Ophiuchi	—	—
—	1723	Mart.	20	—	μ ♐	—	187
—	1724	Mart.	30	—	ξ ♐	—	—
—	——	Nov.	24	—	ν ♐	—	188
—	——	Dec.	11	—	ο ♐	—	—
—	1727	April.	15	—	ι ♑	—	—

Ann.	1727	Aug.	17	♄ cum	θ ♑	pag. 188
—	——	Dec.	30	—	τ ♑	— 189
—	1728	April.	14	—	ι ♒	— 190
—	——	Oct.	30	—	σ ♒	— —
—	1733	Oct.	29	—	β ♈	— —
—	1734	Dec.	16	—	ξ & σ ♈	— 191
—	1737	Jan.	30	—	ε ♉	— —
—	1740	Sept.	18	—	δ ♋	— —

§. II.

JUPITER CUM FIXIS.

Ann.	1718	Mart.	12	♃ cum	α Sir.	pag. 193
—	——	Sept.	26	—	α ♌	— 194
—	——	Nov.	4	—	ρ ♌	— —
—	1719	April.	1	—	α ♌	— —
—	——	Jun.	27	—	ρ ♌	— 195
—	——	Oct.	15	—	β ♍	— —
—	——	Nov.	4	—	* ♍	— —
—	——	—	25	—	η ♍	— —
—	1720	Febr.	22	—	2 * *	— 196
—	——	Mart.	9	—	η ♍	— —
—	——	Nov.	10	—	*m* ♍	— 197
—	1721	Jan.	2	—	λ ♍	— —
—	1722	Jan.	11	—	β ♏	— —
				item	ν ♏	— 198
—	——	Febr.	2	—	ψ Ophiuchi	— —
—	——	—	24	—	ω Ophiuchi	— —

Ann.	1722	Jul.	3	♃ cum	λ ♏	pag.	200
—	——	Sept.	1	—	β ♏	—	201
—	——	—	5	—	ω ♏	—	—
—	1723	April.	22	—	ν ♐	—	202
—	1724	April.	17	—	θ ♑	—	203
—	1725	April.	12	—	λ ♒	—	—
—	——	Maji.	6	—	φ ♒	—	—
—	——	Jun.	23	—	3 * * * ♒	—	—
—	——	Sept.	3	—	φ ♒	—	204
—	——	—	20	—	h ♒	—	—
—	——	Dec.	8	—	h ♒	—	205
—	——	—	24	—	φ ♒	—	206
—	1726	Jan.	4	—	n & i ♒	—	—
—	——	Sept.	3	—	o ♓	—	—
—	1727	Febr.	26	—	o ♓	—	207
—	1728	Aug.	16	—	η ♊	—	—
—	——	—	28	—	μ ♊	—	208
—	1729	Jan.	3	—	η ♊	—	—
—	——	—	20	—	H ♊	—	—
—	——	Oct.	4	—	δ ♋	—	209
—	1730	Jan.	16	—	δ ♋	—	—
—	——	Sept.	9	—	α ♌	—	—
—	1731	Nov.	8	—	η ♍	—	210
—	1732	April.	24	—	η ♍	—	—
				& a ſocia		—	—
—	1733	Aug.	13	—	λ ♍	—	211
—	——	Sept.	27	—	α ♎	—	—
—	——	Dec.	21	—	β ♏	—	—
—	——	—	28	—	β ♏	—	212
					& ω ♏	—	—

					& ν ♏	pag.	212
Ann.	1734	Jan.	16	♃ cum	ψ Ophiuchi	—	—
—	——	—	26	—	ω Ophiuchi	—	—
—	1735	Mart.	6	—	ν ♐	—	213
—	——	—	24	—	σ ♐	—	214
—	1736	Mart.	25	—	ϑ ♑	—	—
—	——	Nov.	13	—	ϑ ♑	—	—
—	——	Dec.	7	—	ι ♑	—	215
—	1737	April.	20	—	φ ♒	—	—
—	——	Jun.	13	—	✳ Ceti	—	—
—	——	Oct.	23	—	φ ♒	—	216
—	——	Dec.	7	—	i ♒	—	218
—	1739	Nov.	17	—	ω ♉	—	—
—	1740	Jul.	18	—	H ♊	—	—
—	——	Aug.	7	—	μ ♊	—	219
—	1741	Jan.	28	—	μ ♊	—	—
				&	2 ✳✳	—	—
—	1744	April.	16	—	γ ♍	—	220

§. III.

MARS CUM FIXIS.

Ann.	1719	Jan.	14	♂ cum	λ ♎	pag.	220
—	——	—	20	—	ω ♏	—	—
—	——	Maj.	24	—	γ ♑	—	—
—	——	—	27	—	δ ♑	—	221
—	——	Jul.	2	—	τ ♒	—	—
—	——	Aug.	25	—	τ ♒	—	—

Ann.	1720	Jan.	13	♂ cum	ζ ♓	pag.	221
—	——	Mart.	1	—	δ ♈	—	—
—	——	—	22	—	A ♉	—	222
—	——	—	31	—	κ & υ ♉	—	—
—	——	April.	5	—	τ ♉	—	—
—	——	—	14	—	* ♉	—	—
—	——	Maji.	18	—	ω & ε ♊	—	223
—	——	Nov.	16	—	κ ♍	—	—
—	——	—	28	—	α ♎	—	—
—	——	Dec.	15	—	κ ♎	—	224
—	——	—	21	—	λ ♎	—	—
—	——	—	25	—	β ♏	—	—
—	1721	Jan.	1	—	ρ Ophiuchi	—	—
—	——	April.	10	—	ι ♑	—	—
—	1722	Jan.	21	—	δ ♈	—	—
—	——	—	25	—	ζ ♈	—	—
—	——	—	28	—	τ ♈	—	225
—	——	Febr.	20	—	A ♉	—	—
—	——	Mart.	7	—	τ ♉	—	—
—	——	April.	25	—	ε ♊	—	226
—	——	Jun.	7	—	η ♋	—	—
—	1723	Mart.	18	—	ι ♑	—	—
—	——	Dec.	1	—	ε ♊	—	—
—	1724	Mart.	24	—	ε ♊	—	—
—	——	Jun.	27	—	α ♌	—	—
—	1725	Aug.	28	—	μ ♊	—	227
—	——	Oct.	24	—	η ♋	—	—
—	1726	Jan.	17	—	ξ ♋	—	—
—	——	Febr.	13	—	υ ♋	—	228
—	——	—	23	—	λ ♋	—	—

Ann.	1727	Dec.	21	♂ cum	σ ♌	pag.	228
—	1728	Maji.	25	—	χ ♌	—	—
—	——	Jun.	22	—	β ♍	—	—
—	——	Nov.	2	—	B Ophiuchi	—	—
—	1729	Aug.	24	—	μ ♋	—	229
—	——	Sept.	1	—	η ♋	—	—
—	——	Nov.	5	—	χ ♌	—	—
—	——	—	12	—	σ ♌	—	—
—	——	Dec.	26	—	γ ♍	—	—
—	1730	Mart.	24	—	l ♍	—	—
—	——	April.	3	—	α ♍	—	—
—	——	—	8	—	θ ♍	—	230
—	——	Aug.	25	—	ι ♏	—	—
—	——	Oct.	9	—	θ Ophiuchi	—	—
—	——	Dec.	22	—	ι ♑	—	—
—	1731	Jan.	2	—	μ ♑	—	—
—	——	—	30	—	φ ♒	—	—
—	——	Nov.	5	—	β ♍	—	231
—	——	—	17	—	η ♍	—	—
—	1732	Mart.	12	—	β ♏	—	—
				&	ν ♏	—	—
—	——	—	23	—	ψ Ophiuchi	—	—
—	——	April.	8	—	ω Ophiuchi	—	—
—	——	Maji.	8	—	α ♏	—	232
—	——	—	21	—	δ ♏	—	—
—	——	Aug.	14	—	σ ♏	—	—
—	——	Sept.	7	—	θ Ophiuchi	—	—
				&	A Ophiuchi	—	—
—	——	Oct.	2	—	λ ♐	—	233
—	——	Nov.	23	—	ϑ ♑	—	—

Ann.	1732	Nov.	28	♂ cum	ι ♑	pag.	233
—	——	Dec.	21	—	σ ♒	—	—
—	1733	Jan.	6	—	φ ♒	—	—
—	——	Febr.	19	—	ζ ♓	—	—
—	——	Oct.	1	—	σ ♌	—	—
—	——	—	27	—	η ♍	—	—
—	——	Dec.	29	—	α ♎	—	234
—	1734	Jan.	17	—	κ ♎	—	—
—	——	—	23	—	λ ♎	—	—
—	——	—	27	—	β ♏	—	—
—	——	April.	4	—	ν ♐	—	—
—	——	Aug.	12	—	β ♍	—	235
—	——	—	15	—	β ♑	—	—
—	——	—	25	—	α ♑	—	—
—	——	Oct.	8	—	η ♑	—	—
—	——	—	26	—	γ ♑	—	—
—	——	—	30	—	δ ♑	—	—
—	——	Nov.	10	—	ι ♒	—	236
—	——	Dec.	9	—	φ ♒	—	—
—	1735	Jan.	25	—	ζ ♓	—	—
—	——	Mart.	4	—	π ♈	—	—
—	——	April.	9	—	υ ♉	—	—
—	——	Maji.	28	—	ε ♊	—	—
—	——	Nov.	25	—	λ ♍	—	—
—	——	Dec.	7	—	α ♎	—	237
—	——	—	9	—	κ ♎	—	—
—	——	—	14	—	ν ♎	—	—
—	1736	Jan.	4	—	β ♏	—	—
—	——	Oct.	12	—	μ ♓	—	238
—	——	Nov.	3	—	ε ♓	—	—

Ann.	1736	Dec.	4	♂ cum	ζ ♓	pag.	239
—	1737	Febr.	1	—	π ♈	—	—
—	——	—	13	—	δ ♈	—	—
—	——	Mart.	5	—	A ♉	—	—
—	1738	Jun.	28	—	o ♓	—	—
—	1739	Jul.	5	—	α ♌	—	240
—	1741	Jan.	21	—	c ♊	—	—
—	1743	Febr.	25	—	ε ♌	—	—
—	1745	Jan.	14	—	γ ♍	—	241

§. IV.

VENUS CUM FIXIS.

—	1718	Sept.	20	♀ cum	α ♌	pag.	241
—	——	Oct.	29	—	ϑ ♍	—	—
—	——	Dec.	21	—	α ♎	—	—
—	1719	Maji.	27	—	ε ♊	—	—
—	——	Jun.	8	—	κ ♊	—	242
—	——	Jul.	14	—	ρ ♌	—	—
—	——	—	26	—	σ ♌	—	—
—	——	Aug.	28	—	α ♍	—	—
—	——	Nov.	30	—	α ♎	—	—
—	——	Dec.	3	—	μ ♎	—	—
—	1720	Febr.	18	—	π ♐	—	—
—	1721	Jan.	2	—	ι ♑	—	243
—	——	—	5	—	γ ♑	—	—
—	——	—	8	—	δ ♑	—	—
—	——	—	11	—	ι ♒	—	—

Ann.	1721	Jan.	21	♀ cum	λ ♒	pag.	243
—	———	Mart.	22	—	δ ♈	—	—
				&	ζ ♈	—	—
—	———	—	24	—	τ ♈	—	—
—	———	—	31	—	Plejad.	—	—
—	———	April.	23	—	β ♉	—	244
—	———	Aug.	10	—	ν ♊	—	—
—	———	—	30	—	f ♊	—	—
				&	g ♊	—	—
—	———	Oct.	25	—	β ♍	—	—
—	———	Nov.	1	—	η ♍	—	—
—	———	—	5	—	γ ♍	—	—
—	———	—	11	—	θ ♍	—	—
—	———	Dec.	3	—	μ ♎	—	—
—	———	—	4	—	α ♎	—	—
—	———	—	19	—	ν ♏	—	—
—	1722	Oct.	8	—	δ ♏	—	245
—	———	—	15	—	σ ♏	—	—
—	———	Nov.	12	—	φ ♐	—	—
—	———	Dec.	24	—	ϑ ♑	—	—
—	1723	Febr.	27	—	α ♑	—	—
				&	β ♑	—	—
—	———	Mart.	2	—	β ♑	—	—
				&	ν ♑	—	—
—	———	Sept.	6	—	α ♌	—	—
—	1724	April.	16	—	υ ♉	—	246
—	———	Jul.	2	—	α ♌	—	—
—	———	Nov.	1	—	β ♍	—	—
—	———	—	10	—	γ ♍	—	—
—	———	—	22	—	ϑ ♍	—	—

Ann.	1724	Dec.	7	♀	cum	κ ♍	pag.	246
—	1725	Febr.	4	—		ο ♐	—	—
						π ♐	—	—
—	——	Dec.	16	—		η ♑	—	247
—	——	—	24	—		γ ♑	—	—
—	——	—	26	—		δ ♑	—	—
—	——	—	30	—		ι ♒	—	—
—	1726	Jan.	5	—		σ ♒	—	—
—	——	—	10	—		λ ♒	—	—
—	——	—	17	—		φ ♒	—	—
—	——	Febr.	13	—		δ ♓	—	—
					&	* ♓	—	—
—	——	Mart.	9	—		η ♓	—	—
—	——	Sept.	19	—		α ♌	—	248
—	——	Oct.	18	—		η ♍	—	—
					&	* ♍	—	—
—	——	—	22	—		γ ♍	—	—
—	1727	April.	26	—		A ♉	—	—
—	——	Maji.	4	—		τ ♉	—	—
—	——	Jul.	8	—		α ♌	—	—
—	——	Aug.	26	—		α ♍	—	—
—	——	Dec.	28	—		γ ♎	—	249
—	1728	Jan.	2	—		ϑ ♎	—	—
—	——	—	4	—		φ ♏	—	—
—	——	Febr.	15	—		ξ ♐	—	—
					&	* ♐	—	—
—	1729	Jan.	6	—		δ ♑	—	—
—	——	Mart.	22	—		δ ♈	—	250
—	——	Sept.	9	—		δ ♋	—	—
—	——	—	29	—		ν ♌	—	—

Ann.	1722	Jul.	3	♃ cum	λ ♏	pag.	200
—	——	Sept.	1	—	β ♏	—	201
—	——	—	5	—	ω ♏	—	—
—	1723	April.	22	—	ν ♐	—	202
—	1724	April.	17	—	θ ♑	—	203
—	1725	April.	12	—	λ ♒	—	—
—	——	Maji.	6	—	φ ♒	—	—
—	——	Jun.	23	—	3 * * * ♒	—	—
—	——	Sept.	3	—	φ ♒	—	204
—	——	—	20	—	h ♒	—	—
—	——	Dec.	8	—	h ♒	—	205
—	——	—	24	—	φ ♒	—	206
—	1726	Jan.	4	—	n & i ♒	—	—
—	——	Sept.	3	—	ο ♓	—	—
—	1727	Febr.	26	—	ο ♓	—	207
—	1728	Aug.	16	—	η ♊	—	—
—	——	—	28	—	μ ♊	—	208
—	1729	Jan.	3	—	η ♊	—	—
—	——	—	20	—	H ♊	—	—
—	——	Oct.	4	—	δ ♋	—	209
—	1730	Jan.	16	—	δ ♋	—	—
—	——	Sept.	9	—	α ♌	—	—
—	1731	Nov.	8	—	η ♍	—	210
—	1732	April.	24	—	η ♍	—	—
				& a ſocia		—	—
—	1733	Aug.	13	—	λ ♍	—	211
—	——	Sept.	27	—	α ♎	—	—
—	——	Dec.	21	—	β ♏	—	—
—	——	—	28	—	β ♏	—	212
					& ω ♏	—	—

Ann.	1734	Oct.	28	♀ cum	ϑ ♍	pag.	253
—	1735	Aug.	28	—	α ♍	—	—
—	1736	Jan.	3	—	ϑ ♎	—	—
—	——	Febr.	16	—	π ♐	—	254
—	1737	Jan.	5	—	γ ♑	—	—
—	——	—	6	—	δ ♑	—	—
—	——	Oct.	8	—	ρ ♌	—	—
—	——	—	14	—	χ ♌	—	—
—	——	—	25	—	β ♍	—	—
—	——	—	31	—	η ♍	—	—
—	——	Nov.	11	—	ϑ ♍	—	255
—	——	Dec.	6	—	ν ♎	—	—
—	——	—	18	—	β ♏	—	—
—	1738	Nov.	14	—	σ ♐	—	—
—	1739	Mart.	4	—	β ♑	—	—
—	——	April.	14	—	λ ♒	—	256
—	1740	Jul.	3	—	α ♌	—	—
—	——	Oct.	29	—	* ♌	—	—
—	——	Nov.	9	—	η ♍	—	—
—	——	—	22	—	ϑ ♍	—	—
—	1741	Jan.	1	—	ν ♏	—	—
—	——	Dec.	24	—	γ ♑	—	257
—	1742	Jul.	11	—	ε ♉	—	—
—	——	Sept.	16	—	ν ♌	—	—
—	——	—	20	—	α ♌	—	—

CAPUT VI.

IMMERSIONES
ET
EMERSIONES SATELLITUM JOVIS.

Ann.	1718	Immerſiones & Emerſiones						pag.	258
—	1719	—	—	—	—	—	—	—	259
—	1720	—	—	—	—	—	—	—	260
—	1721	—	—	—	—	—	—	—	—
—	1722	—	—	—	—	—	—	—	—
—	1723	—	—	—	—	—	—	—	261
—	1724	—	—	—	—	—	—	—	262
—	1725	—	—	—	—	—	—	—	263
—	1726	—	—	—	—	—	—	—	264
—	1727	—	—	—	—	—	—	—	266
—	1728	—	—	—	—	—	—	—	267
—	1729	—	—	—	—	—	—	—	270
—	1730	—	—	—	—	—	—	—	271
—	1731	—	—	—	—	—	—	—	274
—	1732	—	—	—	—	—	—	—	276
—	1733	—	—	—	—	—	—	—	278
—	1734	—	—	—	—	—	—	—	279
—	1735	—	—	—	—	—	—	—	—
—	1736	—	—	—	—	—	—	—	280

Ann.	1737 — — — — — —	pag. 281
—	1738 — — — — — —	— 283
—	1739 — — — — — —	— 284
—	1740 — — — — — —	— 286
—	1741 — — — — — —	— 288
—	1742 — — — — — —	— 290

DE

INSTRUMENTIS ASTRONOMICIS, QUIBUS OBSERVATIONES

ab anno 1746. ad annum 1752. peracta ſunt.

DE HOROLOGIO.

Primis menſibus momenta Obſervationum determinabantur horologio quodam vetere, quod olim ex Belgio attuliſſe dicitur P. Antonius Thomas. Inſtructum id eſt cycloide & pendulo cum duabus lentibus, majore fixa & minore mobili methodo Huygeniana. Exigebatur initio ad tranſitum Solis & fixarum per triangulum filare ferreum meridianum, quod anteceſſor reliquerat, ſic ſatis commode: tum per revolutionem fixæ alicujus ad filum fixum in parvo tubo, quaſi unius pedis, duabus lentibus inſtructo & firmato ad columnam ambulacri, ſatis quidem firmam, ut cui pondus tecti incumbit, ſed ligneam demum. Æſtate anni 1747 exigi cœptum ad meridiem per altitudines correſpondentes Solis, quadrante radii quaſi duorum pedum, opus is eſt D. Chapotot, initio quidem difficilius & rudiuſcule, quod is ſatis firmus non eſſet, deinde autem, reparato, facilius & accuratius, dabo infra ſpecimen. Et priores quidem Obſervationes altitudinum correſpondentium

obiter in ſchedis notatæ perditæ ſunt. Menſe Februario 1748 easdem ſervare, & in adverſaria referre cœpimus.

Menſe Julio 1748 obvenit mihi novum horologium, recens Pariſiis allatum, opus D. Pérache, bonæ notæ, elegans & accuratum, nullis alterationibus obnoxium, præterquam quæ a frigore & calore; hæ autem ipſæ frequenter examinatæ per altitudines correſpondentes; & diligentius, ubi Obſervatio majoris momenti immineret. Hoc horologio conſtituta ſunt tempora Obſervationum partis ſecundæ hujus operis. Dum hæc ſcribo, fabrefit machina, addenda huic horologio, quæ illud ab alterationibus etiam caloris & frigoris defendat, placuit autem inter alias, quam D. Deparcieux invenit, hac ſolum differentia & compendio, quod pro duabus utrinque regulis ferreis & cupreis una ſolum ferrea & cuprea in medio a tergo horologii conſtituatur. Atqui unum horologium, unus demum eſt teſtis; conſtitutum ergo Pariſiis alterum. Electionem commendaveram peritiæ & humanitati optimi & clariſſimi viri Domini Nicolai De l'Isle; is vero tanta etiam diligentia rem curavit, ut ſub finem anni 1752, cum Macaum veniſſem, excepturus Legatum Luſitaniæ, etiam horologium ibidem inveniſſem, quod eadem occaſione Pekinum detuli; non licuit id autem mihi ad uſum componere, niſi poſtquam Legatum Macai reſtituiſſem, Pekinum reduci. Opus id eſt, celeberrimi Artificis Pariſienſis D. Juliani le Roy, inferne fulcris ferreis ad firmitatem, ſuperne tubo cupreo cum immiſſa virga ferrea inſtructum, novo artificio, contra mutationes frigoris & caloris; de organi elegantia, accuratione, firmitate & conſtantia dicere nihil attinet. Quantum experiri adhuc licuit, nullas a frigore & calore alterationes animadvertimus, neque alias.

Sequitur hic ſpecimen, quod ſupra promiſi, altitudinum correſpondentium 1751, 19 Maji:

Mane			*Alt.* ⊙	*Veſp.*			*Mer. non corr.*			
6^h	50′	38″	23°	6^h	0′	43″	11^h	50′	40½″	
—	53	22	—	—	58	1	—	—	41½	
—	55	53	24	—	55	27	—	—	40	
—	58	39	—	—	—	—	—	—	—	
7	1	9	25	—	50	14	—	—	41½	
—	3	53	—	—	47	27	—	—	40	
—	6	20	26	—	44	57	—	—	38½	err.
—	9	3	—	4	42	18	—	—	41½	
8	51	22	46	—	59	52	—	—	37	
—	54	10	—	—	57	1	—	—	35½	
—	56	44	47	—	54	26	—	—	35	
—	59	30	—	—	—	—	—	—	—	
9	2	7	48	—	49	8	—	—	37½	
—	4	55	—	—	—	—	—	—	—	
—	7	33	49	—	43	37	—	—	35	
—	10	23	—	2	40	45	—	—	34	err.

Numerus medius inter 8 priores	11	55	40
Correctio auferenda	—	—	7
Igitur ⊙ in merid. correct.	11	55	33
Numerus medius inter 8 poſter.	11	55	36¼
Correctio auferenda	—	—	5
Igitur ⊙ in merid. correct.	11	55	31¼.

Obſervaveram enimvero jam alias meridiem erutum ex altitudinibus correſpondentibus minoribus interdum non concordare cum meridie eruto ex altitudinibus correſpondentibus majoribus, differentia etiam majore, quam in hac Obſervatione, utique propter varietatem refractionum horizontalium mane & veſpere, non accidit id tamen ſemper; nam obſervavi eodem anno 1751 21 Junii pridie Solſtitii, ubi nulla correctio

Mane			*Alt.* ☉	*Veſp.*			*Mer. non corr.*		
6h	24′	59″	20°	5h	30′	37″	11h	57′	48″
—	27	50	—	—	27	49	—	—	49½
—	30	24	21	—	25	14	—	—	49
—	33	9	—	—	22	25	—	—	47
—	35	45	22	—	19	53	—	—	49
—	38	32	—	5	17	4	—	—	48
8	47	5	47	3	8	32	—	—	48½
—	49	50	—	—	5	46	—	—	48
—	52	20	48	—	5	46	—	—	—
—	55	3	—	3	0	31	—	—	47
—	57	34	49	—	57	59	—	—	46½
9	0	23	—	—	55	16	—	—	49½
—	2	56	50	—	52	38	—	—	47
—	5	43	—	—	49	55	—	—	49
—	8	15	51	—	47	21	—	—	48
—	11	1	—	—	44	36	—	—	48½
—	13	38	52	—	42	1	—	—	50
—	16	20	—	2	39	15	—	—	47½.

Numerus medius ex prioribus 11° 55′ 48″ 25‴.
ex poſter. 11 55 48 8.

Differentia 17‴ neque notabilis, neque admodum certa. Atque (ut ad inſtitutum redeam) hoc modo componebatur horologium ad motum medium Solis; dum autem Obſervationes in adverſaria referebantur, tempora penduli ad tempora vera reducebantur, & tempora Obſervationum ſecundæ partis hujus operis omnia ſunt tempora vera.

DE MICROMETRO.

Scilicet quó factæ ſunt Obſervationes ſecundæ partis, hoc ante aliquot annos nobis obvenit dono R. P. Joannis Baptiſtæ Carbone p. m. Opus eſt Anglicum, Artificis D. I. Siſſons elegans, ſolidum, commodum & accuratum, conſtat duabus laminis cupreis ita inter ſe commiſſis, ut altera juxta alteram immotam moveri poſſit, harum una tubo cupreo adfigitur, qui porro tubo teleſcopii immittitur, & in eo gyrari poteſt. Altera lamina defert fila argentea unum horarium & duo parallela, fixum alterum, alterum mobile, defert item duas cochleas, unam parallelam horario, qua fila parallela inter ſe admoventur, & removentur, alteram horario perpendicularem, infinitam ut vocamus, qua hæc lamina juxta alteram convertitur circa centrum, quod eſt in puncto, quo filum horarium & parallelum fixum ſe mutuo ſecant, felici invento, & egregio artificio.

Comparaturus enim exempli cauſa Planetam aut Cometam cum ſtella fixa, ubi micrometrum ita conſtitutum fuerit, ut fila parallela ſint, item prope parallela æquatori; tum punctum interſectionis, ſive centrum ſtellæ admotum ſic, ut hæc in illud incidat ab utroque filo horario & parallelo fixo biſſecta, aut certe, quod facilius, paullum citra centrum biſſecetur a parallelo fixo, & ita biſſecta tranſeat centrum & horarium progreſſa ſtella ultra centrum, quaſi intervallo unius minuti horarii, ſi a filo fixo exerret, quod plerumque fit, levi converſione cochleæ infinitæ, filum ſimul ad ſtellam reducitur, ſimul parallelum æquatori conſtituitur, magno ſane Obſervatoris commodo, temporis & Obſervationis compendio, ut alia commoda prætercam.

Unum tamen eſt, quod ad majus commodum & compendium huic micrometro interdum opto. Juxta filum horarium ſin-

gula utrinque fila horaria eidem parallela; cum enim ſtellà fixà horarium prætergreſſà, mora aliqua opus ſit ad videndum, an ea in filo parallelo maneat, an non; fac Planetam ſequi ad horarium poſt 7 vel 8 ſecunda penduli, fac una tranſire, & poſtea fixam a ſuo filo exerrare, tum vero differentia aſcenſionis determinari non poterit, niſi repoſito tentamine. At vero ſi ad latus aliud eſſet filum, horarium diſtans a medio uno circiter minuto horario, poſſet filum parallelum fixum ad ſtellam reduci, & parallelum æquatori conſtitui, antequam ea ad horarium ſecundum veniret, & tum ex hoc differentia aſcenſionis conſtitui ſine novo tentamine.

Valores revolutionum micrometri multum & ſæpe exploravi, tabellas complures contexui & retexui ſemper dubius de aliquot ſecundis, ubi hos valores ad menſuram aliquam terreſtrem in debita diſtantia explorarem, ut hodie fieri ſolet, locum habere nunquam potui; exploravi ad motum ſtellarum, ſive quæ prope ab æquatore diſtant, ſive quæ longius habita tum ratione declinationis. Exploravi ad diametrum Solis, ſed complura in his minus certa & accurata videbantur, quam ut generalis inde menſura conſtitui poſſet; venit aliquando in mentem, quod de differentiis declinationum ſtellarum videram in Meridiana Pariſina Caſſini, & bono fato reperi illic differentias declinationum ſtellarum α Capellæ & β Aurigæ; ſtellarum β & γ in capite Draconis, ſtellarum item α Cygni & β Aurigæ, quas omnes quoad declinationem teleſcopium, quo communiter utor, ſex pedum caperet. Atqui ex his utique longe certius, quam ex diametro Solis valor revolutionum determinari poteſt. Facilius enim & certius oculus judicat de ſtella a filo biſſecta, quam de puncto contactus limbi Solis cum filo, ut nihil dicam de altero modo examinandi micrometrum ad motum ſtellarum, ubi error unius ſecundi penduli facit errorem in valore revolutionum 15″ Circuli.

Ergo cum in adverſariis notatos haberem numeros revolutionum, & iſta conſcriberem, anno 1755 die 2 Maji veſpere poſt occaſum Solis exploravi micrometro per teleſcopium 6 pedum differentiam ſtellarum α Capellæ & β Aurigæ, & nihil ſolicitus de differentia aſcenſionis, ſed in id unice intentus, ut utraque ſtella ſuum quæque filum biſſecta decurreret; obtinui primum pro differentia declinationum revolutiones $38\frac{17\frac{3}{4}}{40}$, iterum $38\frac{17\frac{5}{8}}{40}$; tertio $38\frac{17\frac{5}{8}}{40}$ decurrentibus ſemper ambabus ſtellis ſuum quaque filum accurate biſſectis. Differentiam veram declinationum harum duarum ſtellarum ad 1 Jan. 1740 ponit Caſſinus in Meridiana Pariſina, ex Obſervationibus Pariſienſibus $0^\circ\ 48'\ 43''\ 44'''$, ex Obſervationibus Rutenæ a Rodes factis $0^\circ\ 48'\ 47''\ 14'''$, & ex Obſervationibus factis Perpiniani $0^\circ\ 48'\ 46''\ 30'''$. Atqui hæ Obſervationes nondum fuere correctæ, & nutatione axis terræ. Anno ſuperiore, dum altitudinem poli explorarem, tentavi eaſdem corrigere etiam per nutationem axis terræ, ut viderem, quid differentiæ aut accurationis adderet hæc nutatio. Ex Obſervationibus autem iſtis ſtellarum α Capellæ & β Aurigæ ſic correctis, & inde deductis mediis numeris, exiſtit differentia declinationum ſtellarum α Capellæ & β Aurigæ $0^\circ\ 48'\ 44''\ 58'''$ pro illa $0^\circ\ 48'\ 43''\ 44'''$. Obſervationes Rutenæ & Perpiniani, utpote intra paucos dies peractæ, nullam a nutatione mutationem ſubeunt, niſi forte aliquot tertiorum, atque ita inter tres differentias $0^\circ 48'\ 44''\ 58'''$, $0^\circ 48'\ 46''\ 30'''$, & $0^\circ\ 48'\ 47''\ 14'''$; erit arithmetice media $0^\circ\ 48'\ 46''\ 6'''$. Porro a 1 Jan. 1740 ad 2 Maji 1755 mutatione declinationum abiere inter ſe hæ duæ ſtellæ $56''\ 40'''$; igitur tempore Obſervationis 2 Maji erat vera differentia declinationum ſtellarum α Capellæ & β Aurigæ $0^\circ\ 49'\ 42''\ 46'''$; erat autem item tempore

Obſervationis differentia aberrationum earundem, ſtellarum 1″ 46‴ hic addenda, fueritque adeo tempore Obſervationis differentia apparens declinationum, & reipſa obſervata (nutatio hic nihil mutat) 0° 49′ 44″ 32‴ = rev. $38\frac{17\frac{1}{2}}{40}$; igitur revolutio una micrometri 1′ 17″ 38‴ 47⁗; ſimili modo ante paucos dies exploraveram micrometrum ad ſtellas γ & β in capite Draconis, ſcilicet 28 Aprilis initio noctis cepi micrometro per teleſcopium 6 pedum differentiam declinationum harum duarum ſtellarum, ſemel revol. $44\frac{28}{40}$; iterum rev. $44\frac{30}{40}$; tum 4 Maji ſemel rev. $44\frac{30}{40}$, & die 5 Maji ſemel rev. $44\frac{28\frac{1}{2}}{40}$, iterum rev. $44\frac{32\frac{1}{2}}{40}$, quos inter numerus medius & tutus erit rev. $44\frac{29\frac{4}{5}}{40}$. Differentiam veram harum 2 ſtellarum ad 1 Jan. 1740 ponit Caſſinus ex Obſervationibus Dunkerkæ factis 0° 58′ 27″ 46‴, ex Pariſinis 0° 58′ 31″ 36‴, quas inter media eſt 0° 58′ 29″ 41‴, & conſentit Monierius in ſuo Procemio Hiſtoriæ cœleſtis gallicæ, qui eandem differentiam ad idem tempus ex ſuis Obſervationibus ſtatuit 0° 58′ 29″ 18‴, eſto media 0° 58′ 29″ 29½‴. Porro a 1 Jan. 1740 ad initium Maji 1755 mutatione declinationum acceſſerunt hæ 2 ſtellæ inter ſe 34″ 30‴; fuit ergo tempore Obſervationis differentia vera declinationum earundem 0° 57′ 54″ 59½‴; accedebant autem amplius tempore Obſervationis differentia aberrationum 49‴; igitur differentia declinationum apparens, & obſervata (nutatio nihil facit) fuit 0° 57′ 54″ 10½‴ = rev. 44 29⅘. Hinc autem exſiſtit una revolutio micrometri 1′ 17″ 38‴ 38⁗ felici ſane concordia cum quantitate ſupra eruta 1′ 17″ 38‴ 49⁗; poſita itaque quantitate unius revolutionis 1′ 17″ 38‴ 43⁗ 30^{v}, tabellam confeci, ex qua determinavi differentias declinationum ſecundæ partis hujus operis.

Sunt

Sunt, aut erunt fortaſſe, qui hoc genus Obſervationes minus accuratas & tutas æſtiment, ea de cauſa, quod non ſemper pronum ſit fila Micrometri parallela æquatori conſtituere; atqui primum, cum Planeta ex minoribus cum ſtella fixa comparatur, nihil obeſt, quo minus fila Micrometri parallela Æquatori conſtituantur, ſive enim Planeta ſtellam præcedat, ſive ſequatur eo temporis intervallo, quo in tubo movetur, nunquam Declinationem tantum mutabit, ut a ſuo parallelo abeat quantitate, quæ etiam Micrometro percipi poſſet. Deinde, cum Luna cum ſtella comparatur, ſi quidem ſtella præcedat, ſecundum hujus motum fila Æquatori parallela ſtatuuntur, ac licet deinde Luna ſequens ſtellam, dum campum teleſcopii decurrit, mutet Declinationem, ſi centro Lunæ exiſtente circa & prope horarium capiatur differentia Declinationis, nihil eſt, cur ea minus accurata cenſeatur. Quod ſi autem Luna præcedat ſtellam, fatendum eſt, tum Obſervationem tutam cenſeri non poſſe, niſi vel motus Lunæ in Declinationem admodum modicus ſit, vel quod interdum accidit, motum ☾ᵉ in Declinationem compenſet, & quodam modo elidat motus ejuſdem contrarius ex parallaxi, atque ut iſta abſint, & Obſervatio accurata haberi non poſſit, præſtabit fortaſſe interdum vel talem habere, quam nullam, præcipue cum defectus talis, ſi opus fuerit, & operæ pretium, calculo emendari poſſit.

Ceterum licet Obſervationes iſtæ factæ ſint ſolum Pendulo & Micrometro ex penuria aliorum inſtrumentorum, quantum tamen hujuſmodi Obſervationes præſertim Lunæ præſtent aliis, puto, nihil opus eſt pluribus contendere, præcipue poſtquam & aberrationes ſtellarum in lucem prodiere, & poſitiones fixarum tam accuratas habemus, quam eas exhibet in ſuo Catalogo, quem præfixit ſecundæ Parti ſuarum Ephemeridum indefatigabilis D. de la Caille.

In Obſervationibus Lunæ ſecundæ Partis erit fortaſſe, qui primo ſaltem aſpectu majorem in iis adnotandis claritatem optet, igitur ſiquidem ſtella præcedat, & Luna ſequatur; poſtquam ſtella horarium ſuperavit, & fila Micrometri conſtituta ſunt parallela Æquatori, obſervo appulſum ad horarium aut cornuum, aut limbi ☾, aut utrorumque; atque dum centrum Lunæ circa horarium verſatur, admoto filo parallelo mobili ad limbum boreum, vel auſtrinum Lunæ, differentiam Declinationis determino; ſi autem Luna præcedat, non utor limbo, neque cornibus, ſed macula aliqua Lunæ vel ignota, modo ſitu ad rem commoda. Porro ſitum maculæ ad limbos ortivum vel occiduum conſtituo per intervalla vibrationum penduli inter appulſus maculæ, & limbi ad horarium conſtitutis filis Micrometri parallelis Æquatori ita, ut macula ſuum filum fixum biſſecta decurrat; ſitum autem maculæ ad limbos boreum vel auſtrinum conſtituo diſtincta operatione per intervalla filorum parallelorum & numerum Revolutionum decurrente macula filum fixum, & admoto filo mobili ad limbum Lunæ.

Denique moram Diametri Lunæ in horario conficio ex intervallo temporis, quo macula quæcunque decurrit ſecundum horarium intervallum filorum parallelorum æquale Diametro Lunæ, omiſſa interea & relicta ad uſum Obſervationis correctione, ſi qua opus ſit, propter motum proprium Lunæ; numero autem hanc moram, ſeu intervallum temporis a ſecundo, & cum ſecundo, macula erat in uno filo ad ſecundum, & cum ſecundo, quo eadem erat in altero filo, ut vocant incluſive, quod in uſu Obſervationum meminiſſe opus erit.

DE LONGITUDINE GEOGRAPHICA PEKINI.

Determinatur hæc ex Immerſionibus & Emerſionibus Satellitum Jovis, quas obſervavit Petropoli Cl. Vir. D. Joſ. Nicol. de l'Isle, & Pekini P. Ignatius Kögler, magno utrinque numero illas excerpſimus ex Commentariis Academiæ Imperialis Petropolitanæ, quorum tomos priores ſex cum aliis libris nobis dono ante aliquot annos miſit Illuſtriſſimus Dominus Albertus Liber Baro de Korff, tum inclytæ illius Academiæ Præſes, & deinde ad Aulas Daniæ & Sveciæ Legatus; poſteriores decem hoc ipſo anno accepimus per Caravanam, quam vocant Ruſſicam, munificentia Excellentiſſimi Domini Cyrilli Comitis de Raſumowski, ejuſdem nunc nobiliſſimæ Academiæ Præfecti, una cum aliis compluribus libris, & doctiſſimis lucubrationibus, epiſtolis, iconibus, mappis novis magno numero, quibus cumulum addidit literas ſuas plenas generoſa humanitate; hujus beneficentiæ hoc loco grati meminiſſe voluimus, & vero tanto debuimus magis, quanto opportuna magis nobis hujuſmodi ſubſidia obveniunt, tanto intervallo ab orbe literato diviſis, quibus tamen iſthic gentium literas abjicere demum non licet.

Porro cum Immerſiones iſtæ & Emerſiones diverſis utrinque teleſcopiis obſervatæ fuerint, ubi notabilis erat tuborum inæqualitas, correctionem aliquam adhibuimus, quaſi unius ſecundi horarii pro uno pede longitudinis tubi, omiſſa ubi non magna eſt tuborum diverſitas. Neque vero minutius has correctiones in ſingulis Obſervationibus conſectari opus putavimus, nec operæ pretium in tanto Obſervationum numero, ita non ſint alia, quæ pluribus ſæpe ſecundis incertas faciunt hujuſmodi Obſervationes diverſa

utrinque vitrorum claritas, oculorum acies & judicium, obſervandi diligentia, habilitas, uſus, cœli ſudum; horologii accuratio, ut taceam fallacias, ubi Satelles immergens interdum diſparuiſſe videtur, & rurſus apparere, aut reipſa jam immerſus, relicta ſua in oculo ſpecie, etiamdum videri, ut mirum non ſit, differentiam Meridianorum ex ſingulis Obſervationum paribus elicitam, ſæpe admodum variare: addo, quod P. Kögler primis annis neque notaverit, quo teleſcopio Obſervationem feciſſet; nempe ſibi tum ſerebant, non putans fore, ut alii inde meterent, ut adeo raro ſingula, ſed dena duntaxat ſecunda notaret. Equidem credibile eſt, eum ad iſtiuſmodi Obſervationes tubo ſaltem 10 pedum uſum fuiſſe, quanquam habebat unum 8 pedum, quem propter vitrorum claritatem & tractabilitatem adamabat. Pendulum ac tempora exigebat ad tranſitus Solis & fixarum, per triangulum filare Meridianum; qua porro certitudine, vel ex ipſis hiſce Obſervationibus intelligere quadantenus licebit. Immerſiones & Emerſiones, Satellitum utrinque obſervatas, non ſelegi, ſed collegi omnes, quæ aliquo modo inter ſe comparari poſſunt; in uſu tamen earum unum par omitto, quod nimis longe ab aliis abeat manifeſto alterutrinque errore.

Anno						
1726	Sept.	10	17^h	$17'$	$30''$	Pekini Immerſio I^{mi} Satellitis Jovis
		10	11	32	56	Petropoli teleſc. 15 ped.
			5	44	34	
1727	Sept.	15	15	16	15	Pek. Immerſ. I.
		15	9	30	32	Petropoli teleſc. 22 ped.
			5	45	43	
		Corr.	5	45	55	

Anno						
1727	Dec.	2	14^h	30′	42″	Pek. Emerſ. I.
		2	8	46	30	Petrop. teleſc. 22 ped.
			5	44	12	
		Corr.	5	44	0	
1728	Jan.	10	11	42	20	Pek. Emerſ. III.
		10	5	58	7	Petrop. teleſc. 22 ped.
			5	44	13	
		Corr.	5	44	1	
——	Jan.	10	12	45	18	Pek. Emerſ. I.
		10	7	0	12	Petrop. teleſc. 22 ped.
			5	45	6	
——	Febr.	18	11	12	30	Pek. Emerſ. I.
		18	5	28	20	Petrop. teleſc. 15 ped.
			5	44	10	
——	Oct.	3	17	6	0	Pek. Immerſ. I.
		3	11	21	56	Petrop. teleſc. 14 ped.
			5	44	4	
——	Oct.	8	18	6	30	Pek. Immerſ. III.
		8	12	23	45	Petrop. teleſc. 15 ped.
			5	42	45	
——	Dec.	11	17	30	45	Pek. Immerſ. I.
		11	11	46	5	Petrop. teleſc. 13 ped.
			5	44	40	

Anno						
1729	Dec.	7	18h	45′	47″	Pek. Immerſ. I.
		7	13	1	45	Petrop. teleſc. 15 ped.
			5	44	2	
1730	Jan.	2	16	10	45	Pek. Immerſ. II.
		2	10	27	39	Petrop. teleſc. 15 ped.
			5	43	6	
1733	Mart.	21	16	48	15	Pek. Immerſ. I.
		21	11	2	27	Petrop. teleſc.
			5	44	48	
1737	Nov.	13	11	12	10	Pek. Emerſ. II.
		13	5	27	37	Petrop. teleſc. tubo Newtoniano.
			5	44	33	
		Corr.	5	44	13	
1738	Aug.	24	16	1	0	Pek. Immerſ. II. 8 ped.
		24	10	17	13	Petrop. teleſc. 23 ped.
			5	43	47	
		Corr.	5	44	2	
——	Nov.	16	11	0	35	Pek. Emerſ. III. 14 ped.
		16	5	12	54	Petrop. teleſc. 15 ped.
			5	47	41	manifeſto errore.
——	Dec.	30	11	41	0	Pek. Emerſ. I. 8 ped.
		30	5	56	19	Petrop. teleſc. Newt.
			5	44	41	

Anno							
1739	Sept.	23	16ʰ	0′	4″	Pek. Immerſ. I. 13 ped.	
		23	10	16	5	Petrop. teleſc. 15 ped.	
			5	43	59		
——	Sept.	30	17	56	3	Pek. Immerſ. I. 13 ped.	
		30	12	11	27	Petrop. teleſc. Newt.	
			5	44	36		
		Corr.	5	44	43		
——	Nov.	1	14	36	0	Pek. Immerſ. I. 13 ped.	
		1	8	50	28	Petrop. teleſc. 15 ped.	
			5	45	32		
——	Dec.	3	13	12	38	Pek. Emerſ. I. 18 ped.	
		3	7	28	2	Petrop. teleſc. Newt.	ſubdub.
			5	44	36		
		Corr.	5	44	24		
——	Dec.	19	11	23	25	Pek. Emerſ. I. 13 ped.	
		19	5	38	27	Petrop. teleſc. Newt.	
			5	44	58		
		Corr.	5	44	41		
1740	Febr.	3	11	34	27	Pek. Emerſ. I. 13 ped.	
		3	5	51	47	Petrop. teleſc. Newt.	dub.
			5	42	40		
		Corr.	5	42	30		

Anno

1740 Febr. 12 11^h 48′ 45″ Pek. Emerſ. II. 13 ped.

12 6 5 39 Petrop. teleſc. 15 ped. dub.

5 43 6

Sunt igitur differentiæ hæ ordine annorum, ut hic in Tab. I. Et a minoribus progrediendo ad majores, ut in Tab. II.

Tab. I.								*Tab. II.*					
1726	5^h	44′	34″	1737	5^h	44′	13″	5^h	42′	30″	5^h	44′	19″
1727	5	45	55	1738	5	44	2	5	42	45	5	44	24
——	5	44	0	——	5	47	41	5	43	6	5	44	34
1728	5	44	1	——	5	44	19	5	43	6	5	44	40
——	5	44	54	1739	5	43	59	5	43	59	5	44	41
——	5	44	10	——	5	44	43	5	44	0	5	44	43
——	5	44	4	——	5	45	32	5	44	1	5	44	54
——	5	44	45	——	5	44	24	5	44	2	5	45	32
——	5	44	40	——	5	44	41	5	44	2	5	45	48
1729	5	44	2	1740	5	42	30	5	44	4	5	45	55
1730	5	43	6	——	5	43	6	5	44	10	5	47	41
1733	5	45	48					5	44	13			

115^h. 1011.′ 609″ Summa tota harum differentiarum omnium diviſa per numerum earundem 23 dat differentiam mediam inter minores & majores 5^h 44′ 24″.

Et omiſſo ex hac ſumma numero 5^h 47′ 41″, qui nimium a reliquis numeris aberrat, ſumma reſidua erit.

110^h. 964.′ 568″ Quæ diviſa per numerum 22 dat medium 5^h 44′ 14″ 55‴.

Solent

Solent autem defectu Obſervationum utrinque factarum adhiberi duæ diſtantes intervallo unius Revolutionis, harum priori in uno loco factæ additur una Revolutio ex Tabulis ſupputata, & fit tempus, quo ſequens exempli cauſa Immerſio ibidem obſervanda fuerat, atque huic comparatur tempus, quo eadem in altero loco obſervata fuit, quorum temporum differentia eſt differentia Meridianorum. Tentavimus, quid hæc methodus daret, ſive ad corrigendum, quod ſupra obtinuimus, ſive ad confirmandum. Revolutiones ſupputavimus, ex Tabulis Caſſinianis editis anno 1740, quæ licet iterdum non concordent cum Obſervationibus Satellitum Jovis, in una Revolutione nullum errorem creare poſſunt.

Anno						
1726	Aug.	9	14^h	$51'$	$30''$	Petrop. Immerſ. I. teleſc. 15 p. d.
		1	18	28	45	Revolut. una ex Tabul. ſupputata.
		11	9	20	15	Petr. Immerſ. I. altera obſervanda.
		11	15	3	30	Pekini eadem obſervata
			5	43	15	Differentia Meridianorum.
——	Aug.	18	11	15	46	Petrop. Immerſ. I. teleſc. 15 ped.
		1	18	28	34	Revolutio una ex Tab. ſupputata.
		20	5	44	20	Petr. Immerſ. I. altera obſervanda.
		20	11	28	15	Pekini eadem obſervata.
			5	43	55	Differentia Meridianorum.
——	Sept.	10	11	32	51	Petrop. Immerſ. I. teleſc. 15 p. b.
		1	18	28	35	Revolutio una ex Tab. ſupputata.
		12	6	1	26	Petr. Immerſ. I. altera obſervanda.
		12	11	46	15	Pekini eadem obſervata.
			5	44	49	Differentia Meridianorum.

Anno						
1726	Dec.	6	7ʰ	11′	18″	Petrop. Emerſ. I. teleſc. 20 ped.
		1	18	28	52	Revolutio una ex Tab. ſupputata.
		8	1	40	10	Petr. Emerſ. I. altera obſervanda.
		8	7	26	0	Pekini eadem obſervata.
			5	45	50	Differentia Meridianorum.
		Corr.	5	45	40	
1728	Jan.	8	12	33	34	Petrop. Emerſ. I. teleſc. 15 ped.
		1	18	28	50	Revolutio una ex Tab. ſupputata.
		10	7	2	24	Petrop. Emerſ. I. obſervanda.
		10	12	45	18	Pekini eadem obſervata.
			5	43	54	Differentia Meridianorum.
——	Jan.	17	8	53	4	Petrop. Emerſ. I. teleſc. 22 p. b.
		1	18	28	48	Revolutio una ex Tab. ſupputata.
		19	3	21	52	Petrop. Emerſ. I. obſervanda.
		19	9	5	40	Pekini eadem obſervata.
			5	43	48	Differentia Meridianorum.
		Corr.	5	43	36	
——	Sept.	17	12	57	36	Petrop. Immerſ. I. teleſc. 13 p. d.
		1	18	28	26	Revolutio una ex Tab. ſupputata.
		19	7	26	2	Petrop. Immerſ. I. obſervanda.
		19	13	12	12	Pekini eadem obſervata.
			5	46	10	Differentia Meridianorum.

Anno						
1728	Oct.	1	16^{h}	53′	16″	Petrop. Immerſ. I. teleſc. 15 p. b.
		1	18	28	14	Revolutio una ex Tab. ſupputata.
		3	11	21	30	Petr. Immerſ. I. altera obſervanda.
		3	17	6	0	Pekini eadem obſervata.
			5	44	30	Differentia Meridianorum.
——	Nov.	2	13	30	43	Petrop. Immerſ. I. teleſc. 13 p. b.
		1	18	27	55	Revolutio una ex Tab. ſupputata.
		4	7	58	38	Petrop. Immerſ. I. obſervanda.
		4	13	42	45	Pekini eadem obſervata.
			5	44	7	Differentia Meridianorum.
1729	Febr.	13	6	51	37	Petrop. Emerſ. I. teleſc. 15 p. b.
		1	18	28	24	Revolutio una ex Tab. ſupputata.
		15	1	20	21	Petrop. Emerſ. I. obſervanda.
		15	7	4	0	Pekini eadem obſervata. dub.
			5	43	39	Differentia Meridianorum.
——	Mart.	31	7	30	11	Petrop. Emerſ. I. teleſc. 15 ped.
		1	18	28	36	Revolutio una ex Tab. ſupputata.
——	April.	2	1	58	47	Petrop. Emerſ. I obſervanda.
		2	7	44	43	Pekini eadem obſervata.
			5	43	56	Differentia Meridianorum.
1730	Maji	12	9	15	17	Petrop. Emerſ. I. teleſc. 15 p. b.
		1	18	28	42	Revolutio una ex Tab. ſupputata.
		14	3	43	59	Petrop. Emerſ. I. obſervanda.
		14	9	28	45	Pekini eadem obſervata.
			5	44	46	Differentia Meridianorum.

Anno						
1731	April.	22	11h	51'	35"	Petrop. Emerſ. I. teleſc. 15 ped.
		1	18	28	43	Revolutio una ex Tab. ſupputata.
		24	6	20	18	Petr. Emerſ. I. altera obſervanda.
		24	12	4	30	Pekini eadem obſervata.
			5	45	12	Differentia Meridianorum.
——	Maji	1	8	16	54	Petrop. Emerſ. I. teleſc. Newt.
		1	18	28	39	Revolutio una ex Tab. ſupputata.
		3	2	45	33	Petrop. Emerſ. I. obſervanda.
		3	8	29	50	Pekini eadem obſervata.
			5	44	17	Differentia Meridianorum.
		Corr.	5	43	57	
1733	Mart.	28	12	59	46	Petrop. Immerſ. I. teleſc. Newt.
		1	18	28	34	Revolutio una ex Tab. ſupputata.
		30	7	28	20	Petrop. Immerſ. I. obſervanda.
		30	13	13	0	Pekini eadem obſervata.
			5	44	40	Differentia Meridianorum.
		Corr.	5	44	50	
——	Maji	15	10	8	2	Petrop. Emerſ. I. teleſc. Newt.
		1	18	28	47	Revolutio una ex Tab. ſupputata.
		17	4	36	49	Petrop. Emerſ. I. obſervanda.
		17	10	21	0	Pekini eadem obſervata.
			5	44	11	Differentia Meridianorum.
		Corr.	5	44	1	

Anno						
1734	Jun.	26	11^h	23′	47″	Petrop. Emerſ. I. teleſc. Newt.
		1	18	28	38	Revolutio una ex Tab. ſupputata.
		28	5	52	28	Petrop. Emerſ. I. obſervanda.
		28	11	37	0	Pekini eadem obſervata.
			—	—	—	
			5	44	35	Differentia Meridianorum.
		Corr.	5	44	15	
1736	Oct.	5	7	45	23	Petrop. Emerſ. I. teleſc. N. ſat. b.
		1	18	28	44	Revolutio una ex Tab. ſupputata.
		7	2	14	7	Petrop. Emerſ. I. obſervanda.
		7	7	58	50	Pekini eadem obſervata.
			—	—	—	
			5	44	43	Differentia Meridianorum.
		Corr.	5	44	33	
1737	Nov.	16	9	44	14	Petrop. Emerſ. I. teleſc. Newt.
		1	18	28	52	Revolutio una ex Tab. ſupputata.
		18	4	13	6	Petrop. Emerſ. I. obſervanda.
		18	9	56	40	Pekini eadem obſerv. tel. 8 ped.
			—	—	—	
			5	43	34	Differentia Meridianorum.
		Corr.	5	43	14	
1738	Nov.	12	11	17	50	Petrop. Emerſ. I. teleſc. Newt.
		1	18	28	44	Revolutio una ex Tab. ſupputata.
		14	5	46	34	Petrop. Emerſ. I. obſervanda.
		14	11	30	40	Pekini eadem obſervata.
			—	—	—	
			5	44	6	Differentia Meridianorum.
		Corr.	5	43	44	

Anno						
1739	Sept.	7	11^h	$54'$	$18''$	Petrop. Immerſ. I. teleſc. 15 ped.
		1	18	28	31	Revolutio una ex Tab. ſupputata.
		9	6	22	49	Petrop. Immerſ. I. obſervanda.
		9	12	7	50	Pekini eadem obſervata. 13 ped.
			5	45	1	Differentia Meridianorum.
——	Sept.	23	10	16	5	Petrop. Immerſ. I. teleſc. 15 ped.
		1	18	28	32	Revolutio una ex Tab. ſupputata.
		25	4	44	37	Petrop. Immerſ. I. obſervanda.
		25	10	29	0	Pekini eadem obſervata. 13 ped.
			5	44	23	Differentia Meridianorum.
——	Oct.	16	10	33	17	Petrop. Immerſ. I. teleſc. Newt.
		1	18	28	34	Revolutio una ex Tab. ſupputata.
		18	5	1	51	Petrop. Immerſ. I. obſervanda.
		18	10	46	35	Pekini eadem obſervata. 20 ped.
			5	44	44	Differentia Meridianorum.
		Corr.	5	44	54	
——	Dec.	19	5	38	27	Petrop. Immerſ. I. teleſc. Newt.
		1	18	28	45	Revolutio una ex Tab. ſupputata.
		21	0	7	12	Petrop. Immerſ. I. obſervanda.
		21	5	50	44	Pekini eadem obſervata.
			5	43	32	Differentia Meridianorum.
		Corr.	5	43	50	

Anno				
1740	Febr.	3	$5^h\ 51'\ 47''$	Petrop. Emerſ. I. teleſc. Newt. d.
		1	18 28 52	Revolutio una ex Tab. ſupputata.
		5	0 20 39	Petrop. Emerſ. I. obſervanda.
		5	6 2 50	Pekini eadem obſervata. 13 ped.
			5 42 11	Differentia Meridianorum.
1741	April.	8	8 6 30	Petrop. Emerſ. I. teleſc. Newt.
		1	18 28.45	Revolutio una ex Tab. ſupputata.
		10	2 35 15	Petrop. Emerſ. I. obſervanda.
		10	8 20 37	Pekini eadem obſervata. 13 ped.
			5 45 22	Differentia Meridianorum.
		Corr.	5 45 5	

Sunt igitur differentiæ hæ ſerie annorum ut in Tab. III. & ſerie minorum ad majores Tab. IV.

Tab. III.				*Tab. IV.*	
1726	$5^h\ 43'\ 15''$	1730	$5^h\ 43'\ 57''$	$5^h\ 42'\ 11''$	$5^h\ 44'\ 15''$
——	5 43 55	1733	5 44 50	5 42 54	5 44 23
——	5 44 49	——	5 44 1	5 43 14	5 44 30
——	5 45 40	1734	5 44 15	5 43 15	5 44 33
1728	5 42 54	1736	5 44 33	5 43 36	5 44 46
——	5 43 36	1737	5 43 14	5 43 39	5 44 49
——	5 46 10	1738	5 43 44	5 43 44	5 44 50
——	5 44 30	1739	5 45 1	5 43 50	5 44 54
——	5 44 7	——	5 44 23	5 43 55	5 45 1
1729	5 43 39	——	5 44 54	5 43 57	5 45 5
——	5 45 56	——	5 43 50	5 44 1	5 45 40
1730	5 44 46	1740	5 42 11	5 44 7	5 45 56
——	5 44 12	——	5 45 5	5 44 12	5 46 10

$130^h 1138' 807''$ Summa harum omnium differentiarum diviſa per earundem numerum 26, dat numerum medium $5^h\ 44'\ 17''\ 12'''$; obtinui autem ſupra $5^h\ 44'\ 15''$, ut adeo ex illa ſerie recte abjectus videatur numerus ille infelix. $5^h\ 47'\ 41''$:

Tentavi etiam aliter tertio, comparavi inter ſe tempora duarum Immerſionum vel Emerſionum obſervatarum in uno loco, & diſtantium, 3, 4 aut 5 Revolutionibus Satellitis, quo intervallo obſervata fuerit in altero loco ſimilis Phaſis, ex numero & quantitate illarum Revolutionum erui quantitatem unius, aut duarum, quæ addita priori Obſervationi illius loci aut dempta poſteriori dat tempus, quo ibidem obſervanda erat Phaſis, quæ in altero loco obſervata fuit, citra errorem ſaltem, qui in magno numero Obſervationum turbare poſſit; exemplis res liquebit:

Anno 1726	Aug.	9	14^h	$51'$	$30''$	Petr. Imm. I. obſerv. tel. 15 p. d.
		18	11	15	46	Petr. Imm. I. obſerv. tel. eodem.
		8	20	24	16	Revolutiones 5.
		1	18	23	52	Revolutio una; igitur
		11	9	20	22	Petr. obſervanda Immerſ. I.
		11	15	3	30	Pekini Immerſ. I. obſervata; ergo
			5	43	8	Differentia Meridianorum.
——	Aug.	11	15	3	30	Pek. Imm. I. obſerv.
		20	11	28	15	Pek. Imm. I. obſerv.
		8	20	24	45	Revolutio 5.
		1	18	28	58	Revolutio 1.
		18	16	59	17	Pek. obſervanda Immerſ. I.
		18	11	15	46	Petr. Imm. I. obſervata tel. 15 p.
			5	43	31	Diff. Merid. Ann. 1726.

Anno						
1726	Dec.	1	5^h	32′	20″	Pek. Emerſ. I. obſerv.
		8	7	26	0	Pek. Emerſ. I. obſerv.
		7	1	53	40	Revolut. 4.
		1	18	28	25	Revolutio 1.
		6	12	57	35	Pek. obſervanda Emerſ. I.
		6	7	11	18	Petr. Emerſ. I. obſerv. tel. 20 p.
			5	46	17	Differentia Meridianorum.
		Corr.	5	46	7	
1728	Jan.	5	5	20	0	Pek. Emerſ. I. obſerv.
		10	12	45	18	Pek. Emerſ. I. obſerv.
		5	7	25	18	Revolut. 3.
		1	18	28	26	Revolutio 1.
		8	18	16	52	Pek. obſervanda Emerſ. I.
		8	12	33	34	Petr. Emerſ. I. obſerv. tel. 13 p.
			5	43	18	Differentia Meridianorum.
——	Jan.	10	7	0	12	Petr. Emerſ. I. obſerv. tel. 22 p.
		17	8	53	4	Petr. Emerſ. I. obſerv. tel. 13 p.
		7	1	52	52	Revolut. 4.
		1	18	28	13	Revolutio 1.
		12	1	28	25	Petr. obſervanda Emerſ. I.
		12	7	13	27	Pek. Emerſ. I. obſervata.
			5	45	2	Differentia Meridianorum.

Anno						
1730	Nov.	10	19h	51′	59″	Pek. obſervanda Immerſ. I.
		10	14	4	58	Petr. Immerſ. I. obſerv. tel. 13]
			5	47	1	Differentia Meridianorum.
1731	Mart.	2	9	30	0	Pek. Emerſ. I. obſervata.
		9	11	27	40	Pek. Emerſ. I. obſervata.
		7	1	57	40	Revolut. 4.
		3	12	58	50	Revolut. 2.
		5	22	28	50	Pek. obſervanda Emerſ. I.
		5	16	46	7	Petr. Emerſ. I. obſervata.
			5	42	43	Differentia Meridianorum.
——	Mart.	7	11	13	9	Petr. Emerſ. I. obſerv. tel. New
		14	13	19	20	Petr. Emerſ. I. obſervata.
		7	1	56	11	Revolut. 4.
		1	18	29	3	Revolutio 1.
		9	5	42	12	Petr. Emerſ. I. obſervanda.
		9	11	27	40	Pek. Emerſ. I. obſervata.
			5	45	28	Differentia Meridianorum.
		Corr.	5	45	8	
——	Mart.	9	11	27	40	Pek. Emerſ. I. obſervata.
		18	7	52	40	Pek. Emerſ. I. obſervata.
		8	20	25	0	Revolut. 5.
		3	12	58	2	Revolut. 2.
		14	18	54	38	Pek. obſervanda Emerſ. I.
		14	13	9	20	Petr. Emerſ. I. Newt.
			5	45	18	Differentia Meridianorum.
		Corr.	5	44	58	

Anno						
1731	April.	15	9^h	$55'$	$0''$	Petr. Emerſ. I. obſerv. tel. Newt.
		22	11	51	50	Petr. Emerſ. I. obſerv. tel. 15 p.
		7	1	56	50	Revolut. 4.
		1	18	29	13	Revolutio 1.
		17	4	24	13	Petr. obſervanda Emerſ. I.
		17	10	8	40	Pek. Emerſ. I. obſervata.
			5	44	27	Differentia Meridianorum.
		Corr.	5	44	17	
——	April.	17	10	8	40	Pek. Emerſ. I. obſervata.
		24	12	4	30	Pek. Emerſ. I. obſervata.
		7	1	55	50	Revolut. 4.
		1	18	28	58	Revolutio 1.
		22	17	35	32	Pek. obſervanda Emerſ. I.
		22	11	51	50	Petr. Emerſ. I. obſerv. tel. 15 p.
			5	43	42	Differentia Meridianorum.
——	Maji	1	8	17	10	Petr. Emerſ. I. obſerv. Newt.
		8	10	13	7	Petr. Emerſ. I. obſervata.
		7	1	55	57	Revolut. 4.
		1	18	29	0	Revolutio 1.
		3	2	46	10	Petr. obſervanda Emerſ. I.
		3	8	29	50	Pek. Emerſ. I. obſervata.
			5	43	40	
		Corr.	5	43	30	Differentia Meridianorum.

Anno						
1731	Dec.	1	15^h	24′	20″	Pek. Immerſ. I. obſervata.
		8	17	13	45	Pek. Immerſ. I. obſervata.
		7	1	55	25	Revolut. 4.
		1	18	28	52	Revolutio 1.
		6	22	44	53	Pek. obſervanda Immerſ. I.
		6	17	3	5	Petr. Immerſ. I. obſerv. Newt.
			5	41	48	Differentia Meridianorum.
		Corr.	5	42	8	
1732	Febr.	17	11	45	45	Pek. Immerſ. I. obſervata.
		24	13	40	10	Pek. Immerſ. I. obſervata.
		7	1	54	25	Revolut. 4.
		1	18	28	37	Revolutio 1.
		22	19	11	33	Pek. obſervanda Immerſ. I.
		22	13	26	0	Petr. Immerſ. I obſerv. Newt.
			5	45	33	Differentia Meridianorum.
		Corr.	5	45	53	
1733	Mart.	21	16	48	15	Pek. Immerſ. I. obſerv. tel. 14 p.
		30	13	13	0	Pek. Immerſ. I. obſervata.
		8	20	24	45	Revolut. 5.
		1	18	28	58	Revolutio 1.
		28	18	44	2	Pek. obſervanda Immerſ. I.
		28	12	59	46	Petr. Immerſ. I. obſervata Newt.
			5	44	16	Differentia Meridianorum.
		Corr.	5	44	26	

Anno						
1733	Mart.	30	13^h	13′	0″	Pek. Immerſ. I. obſerv. tel. 20 p.
——	April.	6	15	6	30	Pek. Immerſ. I. obſerv. tel. 20 p.
		7	1	53	30	Revolut. 4.
		1	18	28	23	Revolutio 1.
		4	20	38	7	Pek. obſervanda Immerſ. I.
		4	14	55	38	Petr. Immerſ. I. obſervata.
			5	42	29	Differentia Meridianorum.
		Corr.	5	42	39	
——	April.	4	14	55	38	Petr. Immerſ. I. obſerv. Newt.
		13	11	19	50	Petr. Immerſ. I. obſervata.
		8	20	24	12	Revolut. 5.
		1	18	52	12	Revolutio 1.
		6	9	24	30	Petr. obſervanda Immerſ. I.
		6	15	6	30	Pek. Immerſ. I. obſerv. tel. 20 p.
			5	42	0	Differentia Meridianorum.
		Corr.	5	42	10	
——	Maji	6	13	44	17	Petr. Emerſ. I. obſerv. Newt.
		15	10	7	50	Petr. Emerſ. I. obſerv. Newt.
		8	20	23	33	Revolut. 5.
		3	12	57	28	Revolut. 2.
		10	2	41	45	Petr. obſervanda Emerſ. I.
		10	8	27	30	Pek. Emerſ. I. obſerv. tel. 20 p.
			5	45	45	Differentia Meridianorum.
		Corr.	5	45	35	

Anno						
1733	Maji	10	8^h	27′	30″	Pek. Emerſ. I. obſerv. tel. 20 p.
		17	10	21	0	Pek. Emerſ. I. obſerv. tel. 20 p.
		7	1	53	30	Revolut. 4.
		1	18	28	23	Revolutio 1.
		15	15	52	37	Pek. obſervanda Emerſ. I.
		15	10	7	50	Petr. Emerſ. I. obſervata Newt.
			5	44	47	Differentia Meridianorum.
		Corr.	5	44	37	
1737	Sept.	26	7	28	10	Pek. Emerſ. I. obſerv. tel. 14 p.
——	Oct.	3	9	25	50	Pek. Emerſ. I. obſerv. tel. 14 p.
		7	1	57	40	Revolut. 4.
		3	12	58	58	Revolut. 2.
		29	20	27	8	Pek. obſervanda Emerſ. I.
		29	14	42	43	Petr. Emerſ. I. obſerv. Newt.
			5	44	25	Differentia Meridianorum.
		Corr.	5	44	10	
——	Sept.	29	14	42	43	Petr. Emerſ. I. obſerv. Newt.
——	Oct.	8	11	8	7	Petr. Emerſ. I. obſerv. Newt.
		8	20	25	24	Revolut. 5.
		3	12	58	12	Revolut. 2.
		3	3	40	55	Petr. obſervanda Emerſ. I.
		3	9	25	50	Pek. Emerſ. I. obſerv. tel. 14 p.
			5	44	55	Differentia Meridianorum.
		Corr.	5	44	40	

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Anno						
1737	Oct.	3	9^h	25′	50″	Pek. Emerſ. I. obſerv. tel. 14 p.
		12	5	51	30	Pek. Emerſ. I. obſerv. tel. 14 p.
		8	20	25	40	Revolut. 5.
		3	12	58	18	Revolut. 2.
		8	16	53	12	Pek. obſervanda Emerſ. I.
		8	11	8	7	Petr. Emerſ. I. obſerv. Newt.
			5	45	5	Differentia Meridianorum.
		Corr.	5	44	50	
——	Oct.	8	11	8	7	Petr. Emerſ. I. obſerv. Newt.
		17	7	33	45	Petr. Emerſ. I. obſervata.
		8	20	25	38	Revolut. 5.
		3	12	58	16	Revolut. 2.
		12	0	6	23	Petr. obſervanda Emerſ. I.
		12	5	51	30	Pek. Emerſ. I. obſerv. tel. 14 p.
			5	45	7	Differentia Meridianorum.
		Corr.	5	44	52	
——	Nov.	16	9	44	4	Petr. Emerſ. I. obſerv. Newt.
		25	6	7	35	Petr. Emerſ. I. obſerv. Newt.
		8	20	23	21	Revolut. 5.
		1	18	28	41	Revolutio 1.
		18	4	12	55	Petr. obſervanda Emerſ. I.
		18	9	56	40	Pek. Emerſ. I. obſervata.
			5	43	45	Differentia Meridianorum.
		Corr.	5	43	25	

Anno						
1738	Nov.	5	15ʰ	6'	56"	Pek. Emerſ. I. obſerv. tel. 10 p.
		14	11	30	40	Pek. Emerſ. I. obſerv. tel. 10 p.
		8	20	23	44	Revolutio 5.
		1	18	28	44	Revolutio 1.
		12	17	1	56	Pek. obſervanda Emerſ. I.
		12	11	18	0	Petr. Emerſ. I. obſerv. Newt.
			5	43	56	Differentia Meridianorum.
		Corr.	5	43	36	
1739	Jan.	15	9	55	15	Pek. Emerſ. I. obſerv. tel. 18 p.
		24	6	15	20	Pek. Emerſ. I. obſerv. tel. 20 p.
		8	20	20	5	Revolutio 5.
		1	18	27	58	Revolutio 1.
		22	11	47	22	Pek. obſervanda Emerſ. I.
		22	6	3	15	Petr. Emerſ. I. obſerv. tel. 15 p.
			5	44	7	Differentia Meridianorum.
——	Aug.	31	15	42	20	Pek. Immerſ. I. obſerv. tel. 8 p.
——	Sept.	9	12	7	50	Pek. Immerſ. I. obſerv. tel. 13 p.
		8	20	25	30	Revolutio 5.
		1	18	29	7	Revolutio 1.
		7	17	38	43	Pek. obſervanda Immerſ. I.
		7	11	54	18	Petr. Immerſ. I. obſervata.
			5	44	25	Differentia Meridianorum.

Anno						
1739	Oct.	11	8^h	50′	11″	Pek. Immerſ. I. obſerv. tel. 13 p.
		18	10	46	35	Pek. Immerſ. I. obſerv. tel. 20 p.
		7	1	56	24	Revolutio 4.
		1	18	29	10	Revolutio 1.
		16	16	17	25	Pek. obſervanda Immerſ. I.
		16	10	33	0	Petr. Immerſ. I. obſerv. tel. 15 p.
			5	44	25	Differentia Meridianorum.
——	Oct.	16	10	33	0	Petr. Immerſ. I. obſerv. tel. 15 p.
		23	12	28	45	Petr. Immerſ. I. obſerv. tel. 15 p.
		7	1	55	45	Revolutio 4.
		1	18	29	0	Revolutio 1.
		18	5	2	0	Petr. obſervanda Immerſ. I.
		18	10	46	35	Pek. Immerſ. I. obſerv. tel. 20 p.
			5	44	35	Differentia Meridianorum.
——	Dec.	12	9	31	55	Pek. Emerſ. I. obſerv. tel. 18 p.
		19	11	23	25	Pek. Emerſ. I. obſervata.
		7	1	51	30	Revolutio 4.
		1	18	27	56	Revolutio 1.
		17	16	55	29	Pek. obſervanda Emerſ. I.
		17	11	10	13	Petr. Emerſ. I. obſerv. Newt.
			5	45	16	Differentia Meridianorum.
		Corr.	5	45	1	

Anno						
1741	Jan.	24	5h	33′	24″	Pek. Emerſ. I. obſerv. tel. 10 p.
		29	12	57	10	Pek. Emerſ. I. obſerv. tel. 13 p.
		5	7	23	46	Revolut. 3.
		1	18	27	55	Revolutio 1.
		27	18	29	15	Pek. obſervanda Emerſ. I.
		27	12	45	5	Petr. Emerſ. I. obſerv. tel. 15 p.
			5	44	10	Differentia Meridianorum.
——	April.	3	6	26	35	Pek. Emerſ. I. obſerv. tel. 13 p.
		10	8	20	37	Pek. Emerſ. I. obſerv. tel. 13 p.
		7	1	54	2	Revolut. 4.
		1	18	28	34	Revolutio 1.
		8	13	52	3	Pek. obſervanda Emerſ. I.
		8	8	6	50	Petr. Emerſi I. obſerv. Newt.
			5	45	13	Differentia Meridianorum.
		Corr.	5	44	56	
——	April.	8	8	6	50	Petr. Emerſ. I. obſerv. Newt.
		15	10	3	29	Petr. Emerſ. I. obſerv. Newt.
		7	1	56	39	Revolut. 4.
		1	18	29	14	Revolutio 1.
		10	2	36	4	Petr. obſervanda Emerſ. I.
		10	8	20	37	Pek. Emerſ. I. obſerv. tel. 13 p.
			5	44	33	Differentia Meridianorum.
		Corr.	5	44	16	

Anno

1742 Febr. 12	6^h 56′ 55″	Pek. Emerſ. I. obſerv. tel. 13 p.		
19	8 49 25	Pek. Emerſ. I. obſerv. tel. 13 p.		
7	1 52 30	Revolut. 4.		
3	12 56 15	Revolut. 2.		
15	19 53 10	Pek. obſervanda Emerſ. I.		
15	14 8 13	Petr. Emerſ. I. obſerv. tel. 15 p.		
	5 44 57	Differentia Meridianorum.		

Has differentias omnes numero 40 ordine annorum exhibet hic Tab. V. & ordine minorum ad majores Tab. VI.

Tab. V.

An.	h.	′	″	An.	h.	′	″	An.	h.	′	″
1726	5	43	8	1731	5	45	8	1737	5	44	40
——	5	43	1	——	5	44	58	——	5	44	50
——	5	46	7	——	5	44	17	——	5	44	52
1728	5	43	18	——	5	43	42	——	5	43	25
——	5	45	2	——	5	43	30	1738	5	43	36
——	5	44	21	——	5	42	8	1739	5	44	7
——	5	43	22	1732	5	45	53	——	5	44	25
——	5	43	53	1733	5	44	26	——	5	44	25
——	5	43	10	——	5	42	39	——	5	44	35
1729	5	44	36	——	5	42	10	——	5	45	1
1730	5	44	47	——	5	45	35	1741	5	44	10
——	5	47	1	——	5	44	37	——	5	44	56
1731	5	42	43	1737	5	44	10	——	5	44	16
								1742	5	44	57

Tab. VI.

h.	′	″	h.	′	″	h.	′	″
5	42	8	5	43	53	5	44	40
5	42	10	5	44	7	5	44	47
5	42	39	5	44	10	5	44	50
5	42	43	5	44	10	5	44	52
5	43	8	5	44	16	5	44	56
5	43	10	5	44	17	5	44	57
5	43	18	5	44	21	5	44	58
5	43	22	5	44	25	5	45	1
5	43	25	5	44	25	5	45	2
5	43	30	5	44	26	5	45	8
5	43	31	5	44	35	5	45	35
5	43	36	5	44	36	5	45	53
5	43	42	5	44	37	5	46	7
						5	47	1

200^h. 1752.′ 1107″ Eſt ſumma differentiarum omnium, quæ diviſa per earum numerum 40 dat medium

5^h 44′ 15″ 40‴.

Hic numerus cum ſuperioribus duobus

5^h 44′ 17″ 12‴.

Et 5 44 14 55.

Dant medium 5 44 15 56.

Congeſſi denique ſuperiores ſeries & ſummas tres, omiſſo numero 5^h 47′ 41″ omnes in unam ſcilicet:

$440^h.\ 3854.'\ 2482''$ Quæ diviſa per numerum differentiaıum omnium 88 dant numerum medium $5^h\ 44'\ 15''\ 56'''$.

Venit autem inter verſandum hos numeros in mentem Obſervationes ab anno 1733 & poſt factas, accuratiores eſſe poſſe, quam priores. Nam & diligentius notatæ videntnr, & teleſcopia etiam, quibus peractæ ſunt, adnotantur, & ſub id tempus P. Ignatio Kögler Socius additus fuit P. Andreas Pereyra. Collegi igitur primum ex tribus ſeriebus illas, quæ ab anno 1733 factæ ſunt; nempe omiſſo numero $5^h\ 47'\ 41''$. Et eſt ſumma

$215^h.\ 1883.'\ 1190''$. Hæc diviſa per numerum 43 dat medium $5^h\ 44'\ 15''\ 7'''$.

Collegi deinde illas, quæ ante annum 1733 factæ ſunt, & ſumma

225 1971 1292 Diviſa per numerum 45 dat medium $5^h\ 44'\ 17''\ 9'''$.

Et horum duorum numerorum medius eſt $5^h\ 44'\ 16''\ 8'''$.

Poſſent autem etiam alia ratione comparari Phaſes obſervatæ cum obſervandis; exempli cauſa:

Anno						
1728	Oct.	1	16^h	$53'$	$16''$	Petr. Immerſ. I. obſervata; iterum
		3	11	21	56	Petr. Immerſ. I. obſervata; ergo
		1	18	28	40	Revolutio una; fuit autem
		3	17	6	0	Pek. Immerſ. I. obſervata; igitur
		1	22	37	20	Pek. Immerſ. I. obſerv. & different.
			5	44	4	Comparando nempe hanc cum obſervata Petropoli.

Anno

1729	Dec.	7	18^h	45′	47″	Pek. Immerſ. I. obſervata.
		9	13	14	30	Pek. Immerſ. I. obſervata.
		1	18	28	43	Revolutio una.
		7	13	1	45	Petr. Immerſ. I. obſervata.
		9	7	29	28	Petr. Immerſ. I. obſervanda.
			5	45	2	Differentia Meridianorum.

Sed ſatis jam multæ paginæ impletæ, & fatigatus lector propter 2 vel 3 ſecunda. Satis item tuto conſtituta longitudo Pekinenſis, ſiquidem æque tuta eſt differentia Petropolitani ab aliis meridianis Europæis.

Nolui tamen omittere, quam in iiſdem commentariis Tom. XIII. invenimus Eclipſim ☾^{æ} partialem anno 1741 d. 1 Jan. obſervatam in Obſervatorio Imperiali Petropolitano.

A Cl. Viro D. Godefrido Heinſio & a PP. Kögel & Pereyra in Obſervatorio Imperiali Pekinenſi Phaſes utrinque obſervatas, & exiſtentes inde differentias Meridianorum, ſequens Tabella ſiſtit:

Initium Eclipſis Jan. 1	Pekini	18^h	5′	10″
	Petropoli	12	20	50
		5	44	20
Umbra ad mare Humorum	Pekini	18	14	0
	Petropoli	12	28	0
		5	46	0
Umbra ad Grimaldum	Pekini	18	16	0
	Petropoli	12	31	30
		5	44	30

Grimaldus totus in umbra	Pekini	18^h	$18'$	$30''$
	Petropoli	12	34	0
		5	44	30
Umbra ad Tychonem	Pekini	18	22	30
	Petropoli	12	38	0
		5	44	30
Tycho totus in umbra	Pekini	18	24	0
	Petropoli	12	39	0
		5	45	0

Initium quidem Eclipſis Lunæ incertum ferme eſt, appulſus umbræ terræ ad mare humorum obſcuræ ad obſcurum haud multo certior; tres autem ſequentes Phaſes neſcio, quo fato, tam concordes veram demum nobis exhibere videntur duorum Obſervatoriorum Imperialium differentiam $5^h\ 44'\ 30''$. Quid enim? P. Carolus Slavizeck olim magna diligentia, & repetitis vicibus, & poſt dimenſiones ab aliis Patribus noſtris antehac factas, dimenſus denuo muros hujus Urbis Pekinenſis conſtituit menſuras, & deſcripſit plantam, in quibus muro auſtrali, cui Collegium adjacet, tribuit longitudinem 11½; hoc eſt, undecim & dimidii ſtadiorum ſinicorum, ſive 2070 decempedarum.

Ex his menſuris & typo conveniunt intervallo, quod eſt, inter Meridianum Collegii & Meridianum Obſervatorii 1575 decempedæ; quacunque autem menſura gradus terreſtris utamur 1575, decempedæ in hoc parallelo Pekinenſi dabunt $14''$, hoc eſt, decem & quatuor ſecunda temporis ſolaris medii cum paucis tertiis, quæ addita intervallo Meridianorum, Petropolitani, & hujus Collegii ſupra conſtituto $5^h\ 44'\ 16''$ dabunt intervallum duorum

Obſer-

Obſervatoriorum Imperialium, Petropolitani & Pekinenſis $5^h\ 44'\ 30''$. Exempli cauſa pono primum rationem pedis Sinici ad Pariſinum ut 1000000 ad 1014269; ergo 15750 pedes Sinici erunt 15528 pedes Pariſini. Pono deinde ex Tab. Cl. Viri D. de Maupertuis in uno gradu longitudinis ſub parallelo 40°: 43970 hexapedas Gallicas, hoc eſt, 263820 pedes Gallicos, & facio 263820: $216000'''$ :: 15528: $12714'''$, hoc eſt, $3'\ 31''\ 54'''$, quæ in tempore ſolari medio dant $14''\ 5'''$; Sed fuerit fortaſſe operæ pretium, quod ſupra poſui, diſtinctius exponere.

DE RATIONE PEDIS SINICI
REGII AD PEDEM GALLICUM REGIUM.

Pedem Sinicum Regium voco, quem Sinæ vocant Ing.-çao-chi, ſive Ing-ts'ao-tchi, quaſi dicas pedem ædilitium.

Vocant item *Kuon-chi* pedem communem, publicum, Regium, pedem Imperii, & appellatio certior eſt, & menſura conſtantior, quam quod dicunt *Jang-ſin-tien-chi*, quaſi dicas pedem aulicum, quo ſcilicet artifices aulæ ſervitiis addicti utuntur, quemque dicunt intra annos non admodum multos ſæpius mutatum, ſive ad arbitrium Principis, ſive ad menſuram archetypam reſtituendus fuerit. Pronum enim eſt, ut, qui ex menſura archetypa ſibi ſuas deſcribunt, ſenſim minores effingant, ut eſt ingenium opificum Sinarum.

Pedem Sinicum Regium deſcriptum habeo in lamina cuprea ſolida, diviſum more gentis in partes decem, quarum extrema per tranſverſales diviſa eſt in partes 100 ſatis viſibiles, ut harum etiam dimidium diſtingui ſaltem lente admota, & circino etiam capi

poſſint, totus adeo pes in mille partes accurate. Pes Gallicus, cum quo illum comparabam, deſcriptus eſt in regula chalybea, quam olim ad P. Parennin miſit Academia Regia Scientiarum Pariſienſis. Diviſa eſt in tres pedes, & 2 uncias, *pouce*, extrema uncia in 12 lineas per tranſverſales in 20 particulas; igitur uncia in 240 & pes totus in 2880.

Comparabam pedes Sinicum, & Pariſinum, applicando ex una parte earum extremitates, admota lente microſcopica acutiſſima. Exceſſum ex altera parte cupiebam circino item acutiſſimo, interpoſita ſemper lente, hunc transferebam in unciam Pedis Pariſini diviſam in 240 partes, hoc repetitis vicibus per intervalla horarum, imo dierum exceſſum obtinui non ſemper eundem, nec tamen admodum varium.

Primum obtinui pro exceſſu pedis Pariſini ſupra Sinicum 2 lin. + $\frac{2}{20}$, erat ſcilicet pes Sinicus in menſura Pariſini 11 unciarum 9 lin. & $\frac{18}{20}$, malui autem Pariſinum exhibere in partibus decimis, & decimis decimarum pedis Sinici; hoc igitur poſito 1000000, & facta analogia 2838 : 1000000 :: 2880, exiit pes Pariſinus 1014799.

Iterum obtinui exceſſum 2 lin. + $\frac{1}{20}$ ergo Pariſ. 1014442.

Tertio exceſſus 1 lin. + $\frac{19}{20}$ & pes Pariſinus 1013727½.

Quarto exceſſus 2 lin. 0 igitur pes Pariſ. 1014084½.

Quinto exceſſus 2 lin. + 0$\frac{1}{20}$ unde pes Pariſ. 1014263.

Alias contuli pedis Sinici partes 960, ſive 960000 cum pede Pariſino, & obtinui pro exceſſu 7 lin. + $\frac{14}{20}$, unde erutus pes Pariſinus 1014233.

Et poſt varia iſtiuſmodi tentamina vidi interpoſita ſemper lente 11 lin. pedis Pariſini congruere præciſe cum partibus pedis Sinici 930, ſive 930000; igitur pes Pariſinus 1014545.

Denique deſcripta in una lamina cuprea ſolida, menſura 3 pedum Sinicorum cum $\frac{2}{10}$, comparavi cum tota hac menſuram totam Pariſinam. Exceſſum menſuræ Pariſinæ applicui primum pedi Sinico, & interpoſita lente numeravi $\frac{1}{100} + \frac{1}{1000}$, unde ſupputavi pedem Pariſinum 1014316. Deinde eundem exceſſum applicui unciæ Pariſinæ diviſæ in 240 partes.

Et numeravi 1 lin. + $\frac{11\frac{1}{2}}{20}$ &	
Hinc pes Pariſinus	1014028.
Quantitatum harum omnium ſumma	9128337.
Diviſa per earundem numerum 9 dat medium	1014260.
Quod ſi ex his quantitatibus auferantur maxima	1014799.
Et minima	1013727.
Quæ longius abeunt, & reipſa inter combinandum aliquid ſuſpicionis habent, reſiduarum ſumma	7099911.
Diviſa per earundem numerum 7, dat medium	1014273.

Ex his omnibus eſto Ratio pedis Sinici ad Pariſinum, ut 1000000 ad 1014269 certa intra 100000.

P. Slavizeck olim fecerat hanc rationem ut 2000 ad 2029.

Porro menſuram 5 pedum vocant Sinæ Pu. paſſum, & menſuram 10 pedum, decempedam vocant *Cham* ſive *Tchang;* 360 paſſus, ſive 180 decempedæ faciunt unum Stadium, quod vocant *Li;* quod autem dicunt, olim uni gradui terreſtri maximo attributa fuiſſe 250 Stadia, quod tum pes minor eſſet; ſecundum hodiernum autem pedem tribui debere 200, non ſibi conſtant. Nam poſita menſura unius gradus Meridiani in hoc parallelo 40° ex Tabella Newtoni 56945 hexapedarum Pariſienſium, & pede Pariſino ut ſupra 1014269 erunt in uno gradu Stadia Sinica 192 + $\frac{94\frac{1}{2}}{100}$. P. Antonius Thomas olim menſus in hac Planitie Pekinenſi unum gradum, tribuit illi Stadia Sinica 195$\frac{1}{6}$, ſive 35130 decempedas.

DE LATITUDINE

GEOGRAPHICA PEKINI.

Determinata hæc eſt de novo, Quadrante novo recens ex Gallia ad P. Antonium Gaubil miſſo, quem ego Macao, quo legatum Luſitaniæ deduxeram, Pekinum redux mecum detuli, & Pater pro ſua humanitate & meo obſequio mihi utendum tantisper dedit; Opus id eſt Artificis Pariſienſis Domini Langlois, numeris ſuis omnibus & partibus abſolutum omnino & perfectum, cura præcipue Cl. Viri D. Joſ. Nic. de l'Isle Aſtronomi Regii Pariſienſis, qui de Aſtronomia Pekinenſi olim jam præclare meritus pro ſua benevolentia & humanitate ubivis locorum nullam de ea porro merendi occaſionem omittit.

Habet Quadrans radium prope quatuor pedum, tubum micrometro inſtructum, limbum & lineis tranſverſalibus in ſingula minuta diviſum, & in dena punctis etiam minutiſſimis diſtinctum, pedi annexa eſt virga ferrea, quam directivam vocant, cujus ope Quadrans per cochleas attolli aut deprimi quantavis parva quantitate poſſit, habet lentem unam ſeu microſcopium, limbo applicandum, ad puncta & perpendiculum clarius & certius diſtinguenda; habet denique ſpeculum æneum, ſua item lente armatum, ad Obſervationes prope verticem commodius & tutius inſtituendas, quin opus ſit cervicem retorquere.

Utendum hac occaſione ratus ante omnia altitudinem Poli Pekinenſis in hoc Collegio explorare conſtitui; ea jam olim a PP. Gerbillon & Bouvet in hac eadem domo, cum PP. Galli nondum ſeparatam haberent, obſervata fuiſſe dicitur $39^\circ\ 54'\ 0''$.

Poſtea iſthic ibidem eandem, Gnomone 18 pedum obſervavit P. Car. Slavizeck $39^\circ\ 54'\ 18''$ P. Kögler ſemper priore utebatur,

batur, aliis altera magis probabatur, quod de hac conſtaret, quo inſtrumento & modo determinata fuiſſet; de priore non item, nec vero videtur alio inſtrumento determinari potuiſſe, quam Quadrante duorum pedum in radio, quo etiamnum utimur ad altitudines correſpondentes obſervandas. Certe major tum temporis, quod quidem ſciamus, Pekini nullus aderat, & hic ipſe opus eſt admodum mediocre, nullo micrometro inſtructum, neque accuratione hodierna diviſum. Quidquid autem de hoc ſit, poſt dies aliquot quieti datis & humanitatis officiis, compoſitus eſt Quadrans. Ærugo & ferrugo, quæ ex mari aliquæ adhæſerant, deterſæ, micrometrum filis tenuiſſimis ſerici crudi de novo inſtructum, perpendiculum appenſum filo item ſerico ſubtiliſſimo, cujus utrique extremo pili alligati tenuiſſimi, & ipſi ex Gallia cum machina allati, denique accommodatum ſpeculum æneum, cum ſua lente microſcopica, cujus inventi commoda deinde plura ſenſimus.

Sub finem Januarii 1754 demum tentari aliquid cœptum, captæ rudius aliquæ altitudines Solis meridianæ ad organum pernoſcendum, eique aſſueſcendum. Revolutiones micrometri repetita diligentia exploratæ & expenſæ ad diametrum Solis nempe, nec locus erat nec tempus, ut id alia methodo fieret, factum id ſatis accurate & tuto ad præſens negotium; dico hoc, quia Obſervationes ipſas, quas in ſeparato folio obiter notaveram, non invenio, ſed ſolum Tabellam inde confectam, quam hic exhibeo; licet autem in capienda diametro Solis erratum fuiſſet decem ſecundis, quod certe erratum non eſt, in una, alterave Revolutione unius ſolum, alteriuſve ſecundi error erit; uſus ſum diametro Solis, quam in ſuis Ephemeridibus exhibet Cl. Vir D. de la Caille.

Tab. Revol. Microm.				
1$^{R.}$ =	1′	49″	44‴
2 =	3	39	28
3 =	5	29	12
4 =	7	18	56
5 =	9	8	40

Pro determinanda altitudine Poli elegi

Tab. Revol.	*Microm.*		
$6^{R.}$ =	10′	58″	24‴
7 =	12	48	8
8 =	14	37	52
9 =	16	27	36
10 =	18	17	10&c.

lucidas Lyræ & Capellæ, & quæ hanc ſequitur in ſcapula ſiniſtra Aurigæ litera β notatam; harum enim altitudines & a Refractionum periculo immunes ſunt, & eadem opera errorem Quadrantis detegere & determinare poſſunt. Quid quod harum ſtellarum a vertice Pariſienſi diſtantiam in ſua *Meridienne de Pariſ. verifiee*, Sectore ſuo tam accurate conſtituit Cl. Vir D. Caſſini de Thury, ut accuratius nihil ſperari poſſe videatur, ſive inſtrumenti, ſive obſervandi certitudinem ſpectemus; eadem autem certitudine idem Cl. Vir conſtituit deinde anno 1742 altitudinem Poli Pariſienſis: ut adeo ex his velut elementis, atque hac via, qua etiam nullum a Refractionibus novum periculum, altitudo item Poli Pekinenſis certius mihi & citius conſtituenda videretur, quam alia via ex aliis elementis; nolui tamen omittere viam ordinariam idem tentandi per ſtellas circumpolares, atqui ſtellam polarem ipſam ultimam in cauda Urſæ minoris mane & veſpere ſupra & infra polum in Meridiano videndi tempus jam præterierat; uſus ergo interea ſum ſtella β Urſæ minoris.

Obſervationes Lyræ, Capellæ & Aurigæ, omnes correxi per Aberrationes, Nutationes & Refractiones; Aberrationes ſingularum & Refractiones excerpſi ex eadem *Meridienne de Paris*, Nutationes axis Terræ ex Tabella, quam inveni *in Memoires de Trevoux;* ſic correctas earum diſtantias a vertice Pekinenſi comparavi cum diſtantiis earundem a vertice Pariſini determinatis in *la Meridienne de Paris;* ſed primum correctis etiam per Nutationem axis, & tum per præceſſionem æquinoctiorum itentidem excerptam accommodatis ad tempus meæ Obſervationis.

Primum: Januarii die 29 capta fuit altitudo Capellæ ab horizonte boreo, limbo Quadrantis ad occaſum converſo.

Jan. 29 Alt. obſ.		*Err. Quadr.*	*Aberr.*	*Nut.*
° ′	° ′ ″ ‴	′ ″ ‴	″ ‴	′ ‴
84 10 + 202 =	84 13 41 40 —	2 38 34 +	7 30 —	6 0

Altitudo correcta	84°	11′	4″	26‴	
Refractio auferenda			6	35	
Igitur altitudo vera	84	10	57	51	
Et diſtantia vera Capellæ a vertice Pek.	5	49	2	9	ad bor.
Eſt autem diſt. vera Capellæ a vertice Par.	3	7	5	40	ad auſtr.
Igitur diſt. verticum & Polor. Pariſ. & Pek.	8	56	7	49	
Eſt autem altitudo Poli Pariſ. in Obſ. Reg.	48	50	10	0	
Ergo altitudo Poli Pekini in Collegio	39	54	2	11.	

Hanc Obſervationem primum contempſi, quod geminam non haberet, ſed cum poſtea viderem eam cum aliis concordare, nolui illi jus ſuffragii negare. Correctionem item, quam ſupra adhibui propter errorem Quadrantis 2′ 38″ 34‴, ex Obſervationibus ſequentium dierum deduxi. Nam

Deinde: Jan. 30 limbo Quadrantis ad occaſum converſo & poſito perpendiculo in 91° 20′, nempe ultra verticem, cepi altitudinem, ſive verius diſtantiam Lyræ ab horizonte boreo 91° 20′ + 146 = 91° 22′ 40″ 13‴.

Tertio: Jan. 31 limbo Quadrantis ad ortum converſo & poſito perpendiculo in 88° 40′ obſervavi altitudinem Lyræ ab horizonte auſtrino 88° 40′ + 145′ = 88° 42′ 39″ 7‴.

Quarto: Febr. 1 limbo Quadrantis rurſus ad occaſum converſo & poſito perpendiculo in 91° 20′, cepi altitudinem Lyræ ab horizonte boreo 91° 20′ + 142 = 91° 22′ 35″ 49‴, ex his capiendo medium fiunt.

Alt. obſervatæ		*Aberr.*	*Nutat.*	*Alt. correctæ.*
° ′	° ′ ″ ‴	″ ‴		° ′ ″ ‴
91 20 + 144 =	91 22 38 1 —	10 15 +	8 44.	91 22 36 30
88 40 + 145 =	88 42 39 7 +	10 15 —	8 44.	88 42 40 38

Differentia altitudinum	2°	39′	55″	52‴
Semidifferentia & diſtantia a vertice	1	19	57	56
Nonageſimus Quadrantis	90	2	38	34
Refractio addenda diſtantiæ apparenti a vert.			1	27
Diſtantia vera Lyræ a vert. Pekinenſi	1	19	59	23 ad auſt.
Diſtantia autem vera Lyræ a vert. Pariſ.	10	16	4	51 ad auſt.
Igitur diſtantia verticum & Pol. Par. & Pek.	8	56	5	28
Altitudo Poli Pariſienſis in Obſerv. Regio	48	50	10	0
Et altitudo Poli Pekinenſis in Collegio	39	54	4	32.

Non videbatur de nihilo, quod numeri diverſarum ſtellarum tam prope & probe congruerent. Sed non placebat tantus error in machina alioquin tam perfecta; præcipue cum is auferri facile poſſet converſione una cochleæ ad id deſtinatæ, aut certe ad pauca ſecunda diminui, hoc peracto factæ de novo ſequentes Obſervationes:

Febr. 2 & 5 limbo Quadrantis ad occaſum converſo, & perpendiculo poſito in 91° 20′, decurrit Lyra filum micrometri horizontale ambobus diebus biſſecta omnino.

Februarii diebus 13 & 15 limbo Quadrantis ad ortum converſo & perpendiculo poſito in 88° 40′ decurrere viſa eſt Lyra filum horizontale eadem felicitate, ita ut error Quadrantis omnino ablatus videretur; igitur

	Alt. obſervatæ		*Aberr.*	*Nut.*	*Altit. correctæ.*
F. 2	91° 20′	præciſe	— 10 44	+ 8″ 44‴	91° 19′ 58″ 0‴
5	91 20	præciſe	— 10 44	+ 8 44	91 19 58 0
13	88 40	præciſe	+ 13 24	— 8 45	88 40 4 39
15	88 40	præciſe	+ 13 24	— 8 45	88 40 4 39.

Differentia altitudinum	2°	39′	53″	21‴
Semidifferentia & diſtantia apparens a vert.	1	19	56	40½
Nonageſimus Quadrantis	90	0	1	19½

Refra-

Refractio addenda diſtant. apparenti a Vert. 0° 0′ 1″ 27‴.
Diſtantia vera Lyræ a Vertice Pekinenſi 1 19 58 7½ ad A.
Diſtantia vera Lyræ a Vertice Pariſienſi 10 16 4 51 ad auſt.
Diſtantia Verticum & Polor. Par. & Pek. 8 56 6 43½
Altitudo Poli Pariſ. in Obſerv. Regio 48 50 10 0
Altitudo Poli Pekin. in Collegio hoc 39 54 3 16½

Sequitur Obſervatio Capellæ limbo Quadrantis primum ad occaſum converſo, die 2, 5, 6 Februarii.

Alt. Obſerv. *Aberr.* *Nut.* *Alt. correctæ.*

Feb. ° ′ ° ′ ″ ‴ ″ ‴ ″ ‴ ° ′ ″ ‴
2, 84 10 + 60 = 84 11 5 50 + 7 44 — 6 10 = 84 11 7 24
5, 84 10 + 57 = 84 11 2 33 + 7 44 — 6 10 = 84 11 4 7
6, 84 10 + 56½ = 84 11 1 0 + 7 44 — 6 10 = 84 11 2 34

Tum limbo Quadrantis ad ortum converſo, die 11, 14, 17 Februarii.

Feb. ° ′ ° ′ ″ ‴ ″ ‴ ′ ‴ ° ′ ″ ‴
11, 95 50 — 57 = 95 48 57 27 — 7 59 + 6 10 = 95 48 55 38
14, 95 50 — 57 = 95 48 57 27 — 7 59 + 6 10 = 95 48 55 38
17, 95 50 — 56 = 95 48 58 33 — 7 59 + 6 10 = 95 48 56 44

Altitudinum auſtralium medius numerus 95° 48′ 56″ 3‴
Altitudinum borealium medius numerus 84 11 5 0
Differentia altitudinum 11 37 51 3
Semidifferentia & diſtantia apparens a Vert. 5 48 55 31½
Nonageſimus Quadrantis 90 0 0 31½
Refractio addenda diſtantiæ apparenti a Vert. 6 35
Igitur diſt. vera Capellæ a Vert. Pek. ad bor. 5 49 2 6
Eſt autem diſt. vera Capel. a Vert. Par. ad auſt. 3 7 5 40
Igitur diſt. Verticum & Polorum Pariſ. & Pek. 8 56 7 46
Altitudo Poli Pariſ. in Obſervatorio Regio 48 50 10 0
Et altitudo Poli Pekinenſis in hoc Collegio 39 54 2 14

Satis utique feliciter & tuto conſtituta jam videri poterat altitudo Poli in hac domo 39° 54′ 3″ 3½‴; niſi Auriga abnueret, & alio abiret. Sunt autem Obſervationes ſtellæ β in ſcapula ſiniſtra Aurigæ ſequentes; ac primum limbo Quadrantis ad occaſum converſo captæ altitudines boreæ.

	Alt. obſervatæ		*Aberr.*	*Nut.*	*Alt. correctæ.*
Feb.	° ′	° ′ ″ ‴	″ ‴	″ ‴	° ′ ″ ‴
4,84	50 + 580	= 85 0 36 27	+ 6 2	— 8 4	= 85 0 34 25
5,85	0 + 32½	= 85 0 35 40	+ 6 6	— 8 4	= 85 0 33 42

Tum limbo ad ortum converſo altitudines auſtrinæ.

Die.	° ′				
12,95	0 — 28	= 94.59.29.16	— 6.30	+ 8.10	94.59.30.56
14,95	0 — 32	= 94.59.24.53	— 6.38	+ 8.10	94.59.26.25

	°	′	″	‴
Altitudinum auſtrinarum media	94	59	28	40½
Altitudinum borearum media	85	0	34	3½
Differentia altitudinum	9	58	54	37
Semidifferentia ſive diſt. apparens a vertice	4	59	27	18½
Nonageſimus Quadrantis	9	0	1	22
Refractio addenda diſt. apparenti a vertice			5	38
Diſtantia vera ſtellæ β Aurigæ a vert. Pek.	4	59	32	56½ ad b.
Diſtantia vera ejuſdem ſtellæ a vert. Pariſ.	3	56	43	30 ad auſt.
Diſtantia verticum & Polorum Pariſ. & Pek.	8	56	16	26½
Altitudo Poli Pariſienſis in Obſerv. Regio	48	50	10	0
Altitudo Poli Pekinenſis in hoc Collegio	39	53	53	33½

Ut non etiam nihil authoritatis Obſervationi hujus ſtellæ concedatur, tantum tribui non poteſt, ut altitudinem Poli ſupra ex Lyra & Capella determinatam diminuat infra 39° 54′ 0″; Lyra tranſibat Meridianum mane claro jam die, Capella veſpere, & tempus erat accommodandi perpendiculum ſuo puncto ad lucem Solis & diei, & ſemel accommodatum ſæpius reviſitandi & examinandi, ac ſi motum fuiſſet, reſtituendi ac corrigendi, quod diligenter factum, ubi opus erat. Stella β Aurigæ tranſibat Meridianum

poſt Capellam; itaque poſt hujus Obſervationem peractam movendus erat Quadrans, & accommodandum perpendiculum ad ſuum punctum, & tranſitus ſtellæ obſervandus, totum obſcura jam nocte & ad lumen laternæ, ut hæ Obſervationes inferiores ſint ſuperioribus Lyræ & Capellæ, ſupereſt Obſervatio ſtellæ β Urſæ minoris ſupra & infra Polum:

Altitudines infra Polum					*Altitudines ſupra Polum.*				
Febr. 2 veſp.	25°	10′	—	254	F. 3 mane	54°	50′	—	265
4 —	25	10	—	251½	5 —	54	50	—	263
6 —	25	10	—	255	7 —	54	50	—	264
Eſto medium	25	10	—	254		54	50	—	264
Ingr. & Min.	25	5	21	17		54	45	10	18
Refract. auf.	—	2	5	30	E. Caſſ. T.	—	—	41	30
Alt. veræ	25	3	15	47		54	44	28	48
						25	3	15	47
Differentia altitudinum						29	41	13	1
Semidifferentia altitudinum						14	50	36	30½
Altitudo Poli in Collegio						39	53	52	17½.

Hæc determinatio valet eatenus, quod a nullo alio elemento pendeat, nec ſit quidquam, quod illam dubiam facere poſſit præter refractiones; cum determinationes ſupra factæ ex Obſervationibus verticalibus, licet nullum a Refractionibus periculum habeant, pendeant primum a diſtantiis illarum ſtellarum a vertice Pariſienſi, deinde etiam ab altitudine Poli Pariſienſis, & iſta rurſus a ſuis Refractionibus. Ex his colliges, quod libuerit, amice lector! mihi hæc argumenta tanta non ſunt, quanta eſt concordia illa Obſervationum, Lyræ & Capellæ factarum in diverſis punctis limbi Quadrantis, atque in diſtantiis harum ſtellarum a vertice Pariſienſi, cum Operationes totas ante oculos habeamus, nihil eſt, quod vel unius ſecundi dubium

faciat. Altitudine Poli Pariſienſis uſus ſum 48° 50′ 10″, quod ea communior ſit, & ſolum uno ſecundo differat a 48° 50′ 9″, quam anno 1743 determinavit Cl. D. Caſſini ex clara Perſei citra dubium a Refractione, & quod dandum etiam aliquid eſſet illis, qui illam majorem volunt. Ceterum altitudo Poli Pekinenſis, ut ſupra determinata eſt, ſemper ſequetur certitudinem Poli Pariſienſis, & vel hoc ipſo ſatis tuta. Quod attinet ad altitudinem Poli ſupra erutam ex Obſervationibus ſtellæ β Urſæ minoris 39° 53′ 52″ 17‴; non ſcio, an Refractio v. g. 2′ 5″ 30‴ in altitudine 25° tam tuta ſit aut conſtans, ut multum poſſit detrahere argumento illi concordiæ inter Lyram & Capellam, & ut aliquid detrahat, puto non erraturos nos ultra tria ſecunda, ſi dicamus latitudinem Geographicam Collegii Pekinenſis eſſe 39° 54′ 0″.

Et vero hæc ipſa eſt, quæ in *Connoiſſances des temps* a multis jam annis aſteriſmo etiam notatur; quibus autem Obſervationibus tanta certitudo nitatur, nobis quidem iſthic non conſtat; quæ præ manibus nobis ſunt, ſuperioribus annis factæ, non concordant. An forte olim aliquæ factæ fuerint ab Anteceſſoribus noſtris, & in Europam miſſæ, quarum copiæ hic ſervatæ non fuerint? Sed quibus inſtrumentis? An inter plures ultro citro aberrantes placuit hic numerus medius, & rotundus.

Sed poſita jam latitudine Collegii hujus, conſtituenda etiam eſt latitudo Obſervatorii Publici; Nam & illico Obſervationes interdum aliquæ ex officio & more faciendæ, præſertim Eclipſium Solis & Lunæ. Ex menſuris Patris Slavizeck, & typo murorum Pekinenſium ab illo facto parallelus Obſervatorii borealior eſt parallelo Collegii 240 decempedis Sinicis, quibus reſpondent 25 ſec. Circuli; erit igitur latitudo Obſervatorii 39° 54′ 25″.

DE TELESCOPIO MERIDIANO.

Quod aliqui inſtrumentum Culminatorium vocant, Galli l'Inſtrument de Paſſage, hoc ante hos annos accepimus dono Cl. Viri D. Antonii Ribeiro Sanchez Luſitani, antehac Aulæ Petropolitanæ Medici, poſtquam per annos complures lectiſſimorum librorum copia Aſtronomiæ Pekinenſi liberaliter providiſſet, commendaverat is hoc inſtrumentum curandum Londini Cl. Viris D. Petro Colinſon & D. Jacobo de Caſtro Societatis Regiæ Londinenſis Sodalibus, quorum cura id ad nos tranſmiſſum eſt cum præclara inſtructione Cl. Viri D. Joannis Bevis ejuſdem Societatis Aſtronomi, de eo rite collocando. At enimvero dum locus eidem opportunus quæritur, dum fulcra ſaxea ourantur, dum ædicula exſtruitur, annus abiit, ſucceſſere itinera, & poſt reditum valetudines & negotia, quo minus id ad uſum tuto conſtitueretur, ante finem anni ſuperioris aut initium hujus 1756.

Teleſcopium eſt 3 pedum, cum axe duorum, cujus extremitatibus libella appenditur, qua id horizonti parallelum conſtituatur, habet in foco communi lentium filum unum horizontale cum tribus verticalibus, habet item in extremitate axis ſemicirculum, quaſi unius pedis fulcro affixum, cujus adminiculo id, ad quam libuerit, altitudinem elevari poſſit, & interdiu etiam ſtellæ in Meridiano obſervari. Nec opus fuſiore jam deſcriptione. Geminum eſt illius, cujus figura & explicatio proponitur, in Hiſtoria Cœleſti Gallica Cl. Viri D. de Monnier, organum omnibus partibus ſuis perfectum.

Impoſitum eſt duobus fulcris ſaxeis parallelepipedis, altis pedes 5 circiter, latis utrinque pedes duos, quæ ne pondere

ſubſiderent, terra, cui inſiſtunt, multo ante verbere addenſata & conſtipata immixtis etiam calce & arena. Supra extructa ædicula decem pedes longa, lata & alta, cum valvulis boream & auſtrum verſus, quæ clauſæ aeris injurias arceant, & apertæ totum Meridianum aperiant, ſi paucos gradus ad horizontem demas, imo addas; additum denique inſtrumento ſuum pendulum bonæ notæ.

Antequam inſtrumentum ſuo loco ad uſum ſtatueretur, examinata primum & determinata eſt poſitio recta & orthogonalis axis tubi, ſeu lineæ fiduciæ, quam vocant ad axem rotationis; neque enim hoc ſuo loco fieri poterat, quod horizon non pateret; ergo ex edito loco domus impoſito ibi inſtrumento fulcris extemporaneis & axe rotationis ad ſitum horizontalem compoſito, collimatum ad apicem cujuſdam turris diſtantis, quaſi duobus aut tribus ſtadiis ſinicis, & ad globulos illi infixos, ita, ut filum verticale medium exacte biſſecaret globulum, & converſis extremitatibus axis ad fulcra oppoſita, ſi illum non biſſecaret per duas parvas cochleas promota aut remota fila verticalia medietate aberrationis, idque iterum ac tamdiu repetito examine, donec verticale medium in utraque poſitione globulum biſſecaret; hoc per vices horarum & dierum perfecto inſtrumentum ſuo loco poſitum. Ibi poſtquam ope libellæ & cochleæ verticalis ad id deſtinatæ axis rotationis parallelus, horizonti conſtitutus, dum inſtrumentum ad ſitum Meridianum componere laboro, & jam prope abeſſet, venit in mentem poſitionem axis tubi rectam ad axem rotationis de novo explorare alio modo. Obſervaveram repetitis vicibus intervalla duo trium filorum verticalium tam eſſe inter ſe æqualia, ut tantundem temporis laberetur ab appulſu ſtellæ ad primum filum, ad appulſum ad medium, quantum a medio ad tertium ſine differentia unquam vel medii ſecundi temporis, ergo numeratis vibrationibus penduli, quibus ſtella a primo filo pervenit medium, tum converſo celeriter axe ro-

tationis ejuſdem extremitatibus in oppoſita fulcra impoſitis perrexi numerare, dum ſtella ad tertium filum perveniret, imo ad primum rediret; cumque hoc examen multoties repetiiſſem variis noctibus ad diverſas ſtellas etiam circumpolares, ubi error, ſiquis ineſſet, citius pateret, eundem ſemper numerum vibrationum obtinui poſt converſionem axis in reditu ſtellæ a medio filo ad primum, quem ante in itu numeraveram, argumento: poſt converſionem axis lineam fiduciæ in idem cœli punctum incidiſſe, in quod incidebat ante converſionem, quod utique futurum non erat, niſi axis tubi & axis rotationis ſe mutuo ad angulos rectos accurate ſecarent.

Conſtituto igitur axe rotationis recto ad axem tubi & parallelo ad horizontem, ſupererat tertium, ut circulus, quem linea fiducia in cœlo deſcriberet, Meridianus eſſet, hoc curabam per altitudines correſpondentes, atque ut me citius expedirem, & ſimul haberem, ad quod deinde, quoties opus eſſet, ſtatum inſtrumenti explorarem, cœpi eadem nocte inter 27 & 28 Oct. 1755 altitudines correſpondentes ſtellarum γ Caſſiopeæ & β Ceti, quarum declinationes diſtant 78° 45′. Ex octo paribus altitudinum ſatis concordibus elicui culminationem ſtellæ β Ceti 10^h 8′ 58″ 30‴ ex totidem culminationem ſtellæ γ Caſſiopeæ. 10 19 51 34 differentia 10′ 53″ 4‴.

Sequentibus noctibus obſervabam culminationes earum in teleſcopio Meridiano volvendo ſemper & revolvendo coehleam horizontalem, ad id deſtinatam, dum differentia culminationum exiret 10′ 53″; ita die 9 Nov. cum β Ceti tranſiviſſet filum verticale medium 9^h 18′ 40″; tranſivit idem γ Caſſiopeæ 9^h 29′ 33″, eodem modo ſequentibus diebus:

Nov.	11	β Ceti	9^h	10′	56″	& γ Caſſiopeæ	9^h	21′	49″.
—	12	—	9	7	5½	—	9	17	58½
—	13	—	9	3	16	—	9	14	9

Nov,	14	β Ceti	8^h	59′	26½″	& γ Caſſiopeæ	9^h	10′	19½″
—	18	—	8	44	11½	—	8	55	4½
—	20	—	8	36	48	—	8	47	41
—	21	—	8	33	8½	—	8	44	1½.

Differentia ſemper eadem 10′ 53″; unde concludebam teleſcopium in Meridiano volvi, dumque ita volveretur, obſervavi item differentias culminationum α Cygni & Fomahan, harum media eſt 2^h 10′ 37″ 49‴, huic ſi addam 37‴ propter aberrationes utriuſque ſtellæ, erit differentia vera culminationum ſive aſcenſionum in tempore ſolari medio 2^h 10′ 38″ 26‴, & additis 21′ 28″ erit in tempore primi mobilis 2^h 10′ 59″ 54‴, & in partibus Æquatoris 32° 44′ 58″ 30‴.

Nov.	11	2^h	10′	37″
—	12	—	—	38
—	13	—	—	37½
—	17	—	—	38
—	18	—	—	37½
—	22	—	—	38½
—	28	—	—	38½
—	30	—	—	37½

Obſervatæ item differentiæ culminationum Lyræ & Fomahan, has inter media erit 4^h 14′ 44″ 43‴ & ablatis propter aberrationes ſtellarum 1″ 10‴ erit vera differentia aſcenſionum 4^h 14′ 43″ 33‴ in tempore ſolari medio, & additis 41″ 40‴ in tempore primi mobilis, erit 4^h 15′ 25″ 13‴, & in partibus Æquatoris 63° 51′ 18″ 15‴.

Nov.	12	4^h	14′	45″
—	13	—	—	45½
—	25	—	—	45
—	26	—	—	44
Dec.	6	—	—	44½
—	9	—	—	45
—	11	—	—	44

Porro volens poſitionem Meridianam inſtrumenti alio experimento confirmare, cepi altitudines correſpondentes ſtellarum α Capellæ & α Sirii, quarum declinationes differunt 62° 10′; & nocte inter 6 & 7 Jan. 1756 cepi altitudinum paria 8 & Sirii paria 9, ex quibus erui Capellam culminaſſe 9^h 57′ 34″ 37‴, & Sirium 11^h 33′ 0″ 0‴, differentia 1^h 35′ 25″ 23‴, de qua, ut certior eſſem, nocte inter 12 & 13 Januarii cepi altitudinum Capellæ paria 12,

Sirii

Sirii 14, ex quibus erui Capellam culminaſſe $9^h\ 34'\ 8''\ 30'''$, & Sirium $11^h\ 9'\ 33''\ 8'''$, differentia $1^h\ 35'\ 24''\ 38'''$, numerus medius $1^h\ 35'\ 25''$ eſto differentia inter Capellam & Sirium, ſecundum hanc conſtituto inſtrumento, tentatæ aliquæ Obſervation. e. c.

		h	′	″
1756 Febr. 12	☉ limbus prior in Meridie	0^h	$15'$	$17''$
	Poſterior	0	17	31
	Diameter ☉	—	2	14
	Semidiameter	—	1	7
	☉ centrum in Meridie	0	16	24
	α Capellæ in Meridie	7	32	28
	β Rigel.	7	36	43½
	α Columbæ	8	4	39
	β Aurigæ	8	15	27
	α Sirii	9	8	3
	☾æ limbus prior	9	20	49½
Febr. 16	α ♏ Antares mane	6	34	36
	☉ limbus prior	0	14	57
	Poſterior	0	17	0
		0	2	13
		0	1	6½
	☉ Centrum	0	16	3½
	α Capellæ	7	16	42
	β Rigel.	7	20	48
	α Columbæ	7	48	44
	β Aurigæ	7	59	31
	ζ Sirii	8	28	45
	α Sirii	8	52	17
	ε Sirii	9	6	44
Febr. 18	α ♏ Antares mane	6	26	39
	η Draconis	6	32	52

Febr. 18	α Lyræ	8^h	40′	28½″
	☉ limbus prior	0	14	44
	Poſterior	0	16	56
		0	2	12
		0	1	6
	Centrum	0	15	50
	α ♉ Aldebaran.	6	32	6½
	α Capellæ	7	8	47
	β Rigel.	7	12	52½
	α Columbæ	7	40	49
	β Aurigæ	7	51	36
	α Sirii	8	44	12.

Porro ne unquam deeſſet, ad quod inſtrumentum explorarem, & ſi quo caſu motum fuiſſet, reſtituerem, conſtitui obſervare, quam plurima poſſem, paria ſtellarum, quarum quam minima eſſet differentia aſcenſionum, maxima declinationum, exempli cauſa:

1756 Mart. 4	α ♏ Antares mane	5^h	26′	16½″	decl. a.	25°	52′
	γ Draconis	5	32	30	decl. b.	62	6
	Differentia aſcenſ.		6	13½	diff. d.	87	58
	α Lyræ	7	40	5	decl. b.	38	34
	Diff. aſc. ab α ♏	2	13	48½	diff. d.	64	26
	☉ limbus prior	0	10	56			
	poſterior	0	13	6			
		0	2	10			
		0	1	5			
	☉ centrum	0	12	1			
	♀	2	3	57½			
	α Capellæ	6	8	25	decl. b.	45°	43′
	β Rigel.	6	12	30	decl. a.	8	31.

1756	Mart. 4	α Columbæ	6^h	$14'$	$26''$	decl. a.	34°	$14''$
		β Humerus Aurigæ	6	51	14	decl. b.	44	53
		α Sirii	7	43	50	decl. a.	16	24
		π in puppi Navis	8	17	54	decl. a.	36	40
		η in cauda Sirii	8	23	48	decl. a.	28	50
		α Caſtoris	8	28	19½	decl. b.	32	25
		α Procyon.	8	35	49	decl. b.	5	51
		β Pollucis	8	39	38½	decl. b.	28	37
		ζ in puppi Navis	9	4	16	decl. a.	39	19
		ι Urſæ majoris	9	51	29	decl. b.	49	0
		κ Urſæ majoris	9	55	56	decl. b.	48	8
		λ in velo Navis	10	8	7	dec. a.	42	27
—— —	5	ρ ♏ mane	4	49	50	decl. a.	28	28
		θ Draconis	5	5	15	decl. b.	59	15
		α ♏ Antares	5	22	21	decl. a.	25	52
		η Draconis	5	28	34	decl. b.	62	6
—— —	10	β Aurigæ veſpere	6	27	50	decl. b.	44	53
		α Sirii	7	20	26	decl. a.	16	24
		η in cauda Sirii	8	0	23½	decl. a.	28	50
		α Caſtoris	8	4	55	decl. b.	32	25
		α Procyon.	8	12	25	decl. b.	5	51
		β Pollucis	8	16	14½	decl. b.	28	37
		ζ in puppi Navis	8	40	52	decl. a.	39	19
		ι Urſæ majoris	9	28	5½	decl. b.	49	0
		κ Urſæ majoris	9	32	33	decl. b.	48	8
		λ in velo Navis	9	44	43	decl. a.	42	27
		θ in genu Urſæ maj.	10	2	0½	decl. b.	52	49
—— —	11	α ♏ Antares mane	4	58	57½	decl. a.	25	52
		η Draconis	5	5	11	decl. b.	62	6
		ζ Herculis	5	16	30	decl. b.	32	5

1756 Mart. 11	η Herculis	5ʰ	18′	49½″	decl. b.	39°	25″
	μ ♏	5	19	49	decl. a.	37	36
	ε Herculis	5	35	19	decl. b.	31	19
	θ Ophiuchi	5	51	22	decl. a.	24	44
	α Lyræ	7	12	45½	decl. b.	38	34
——— — 12	β Aurigæ veſpere	6	19	56⅓	decl. b.	44	53
	α Sirii	7	12	32½	decl. a.	16	24
	π in puppi Navis	7	46	36	decl. a.	36	40
	η in cauda Sirii	7	52	30	decl. a.	28	50
	α Caſtoris	7	57	1	decl. b.	32	25
	α Procyon.	8	4	31	decl. b.	5	51
	β Pollucis	8	8	20⅓	decl. b.	28	37
	ζ in puppi Navis	8	32	58	decl. a.	39	19
	ι Urſæ majoris	9	20	11	decl. b.	49	0
	κ Urſæ majoris	9	24	38	decl. b.	48	8
	λ in velo Navis	9	36	49	decl. a.	42	27
	θ in genu Urſæ maj.	9	54	6	decl. b.	52	49
——— — 14	ρ ♏ mane	4	14	35½	decl. a.	28	28
	π ♏	4	16	51	decl. a.	25	23
	β ♏	4	23	58½	decl. a.	19	7
	θ Draconis	4	29	59½	decl. b.	59	15
	α ♏ Antares	4	47	7	decl. a.	25	52
	η Draconis	4	53	20	decl. b.	62	6
	α Lyræ	7	0	55	decl. b.	38	34
——— — 16	α Lyræ	6	52	50	decl. b.	38	34
	☉ limbus prior	0	7	39			
	Poſterior	0	9	48			
			2	9			
			1	4½			
	☉ centrum	0	8	43½			
	α Capellæ	5	21	7	decl. b.	45	43.

1756 Mart. 16	β Rigel.	5^h	25′	12½″	decl. a. 8′	31″
	β Aurigæ	6	3	55½	decl. b. 44	53
	α Sirii	6	56	32	decl. a. 16	24
	π in puppi Navis	7	30	36	decl. a. 36	40
	η in cauda Sirii	7	36	29½	decl. a. 28	50
	α Caſtoris	7	41	0½	decl. b. 32	25
	ι Urſæ majoris	9	4	10	decl. b. 49	0
	χ Urſæ majoris	9	8	37	decl. b. 48	8
	λ in velo Navis	9	20	49	decl. a. 42	27
	θ in genu Urſæ maj.	9	38	5½	decl. b. 52	49
—— — 17	α ♏ Antares mane	4	35	3	decl. a. 25	52
	η Draconis	4	41	16	decl. b. 62	6
	μ in cauda ♏	4	55	54½	decl. a. 37	36
	Gemina prioris	4	56	22½	decl. a. 37	36
	ε Herculis	5	11	24	decl. b. 31	19
	υ in cauda ♏	5	34	36½	decl. a. 37	4
	λ in cauda ♏	5	37	28	decl. a. 36	54
	θ in cauda ♏	5	40	12¼	decl. a. 42	49
	β Draconis	5	45	16	decl. b. 52	30
	α Lyræ	6	48	51	decl. b. 38	34.

Igitur differentia aſcenſionum ſtellarum α ♏ & α Lyræ.

Febr. 18	2^h	13′	49½″	
— 20	—	—	49¾	
— 21	—	—	49¼	
Mart. 4	—	—	48½	
— 11	2	13	48	
— 14	—	—	48	
— 17	—	—	48.	

Ex his medius Numerus 2^h 13′ 48″ 39‴

Et addendo propter Aberrationes 1 9

Erit differ. aſcenſionum vera	$2^h\ 13'\ 49''\ 48'''$
Et addendo ad Temp. P. Mobil.	21 59
Erit in Temp. Primi Mobil.	2 14 11 47.

Hac methodo licebit ſemper cognoſcere ſtatum inſtrumenti, atque ſi etiam in magna differentia declinationum error unius, verbi gratia, ſecundi irrepat, poterit in locis intermediis vel nullus eſſe, vel facile calculo elici & corrigi, atque ita appulſus Solis tuto conſtitui & loca illius quævis, ac præcipue Solſtitia certo determinari, poſtquam aſcenſiones rectæ ſtellarum, ſaltem principalium, tanta certitudine conſtitutæ jam ſunt; habita ſemper ratione proceſſionis Æquinoctiorum, aberrationum atque etiam nutationum.

Stellas primæ magnitudinis interdiu etiam hoc inſtrumento videre licet, & α Lyræ & α Sirii toto anno.

Anno 1755			In 1mo filo		In 2do filo		In 3^{tio} filo
Dec.	27	⊙ limb. pr.	$0^h\ 9'\ 36''$	—	$0^h\ 10'\ 30''$	—	$0^h\ 11'\ 24''$
		Et poſter.	0 11 58	—	0 12 52	—	0 13 46
		Et Lyram	0 16 40	—	0 17 43½	—	0 18 47
—	28	⊙ limb. pr.	0 10 21	—	0 11 15		
		Et Lyram	0 12 59	—	0 14 2	—	0 15 5
—	29	Lyram	0 9 15½	—	0 10 18½	—	0 11 21½
		⊙ limb. pr.	0 — —	—	0 11 53	—	0 12 47
		Et poſter.	0 13 21	—	0 14 15	—	0 15 9
—	30	Lyram	0 5 32½	—	0 6 36	—	0 7 39½
		⊙ limb. pr.	0 11 46	—	0 12 40	—	0 13 34
		Et poſter.	0 14 8	—	0 15 2	—	0 15 56.

ERRATA

PARTIS I.

Pag. 32 lin. 7. vera, *lege* vero.
Pag. 94 lin. 1. Jun. *lege* Jul.
Pag. 111 lin. 3. χ *lege* ϰ.
Pag. 323 lin. 1. $6^h\ 0'\ 45''$ *lege* $5^h\ 0'\ 43''$.
Pag. 327 lin. 14. correctæ, &, *lege* correctæ aberratione, &
Pag. 366 lin. 8 *Verifice lege* verifiée.
Pag. 371 lin. 12 Ingr. & Min. *lege* In Gr. & Min.

PARTIS II.

Pag. 3 lin. 1. videatur, *lege* videtur.
Ibidem lin. 2. altitudinis elevatis *lege* tectis II digitis.
Pag. 111 lin. 3. pedum. Ordinario, *lege* pedum ordinario.
Pag. 432 lin. 6 $18'\ 29''$ *lege* $18'\ 26''$—
Pag. 448 lin. ultima 403 *lege* 430 —

OBSERVATIONES ASTRONOMICÆ.

PARS SECUNDA.

OBSERVATIONUM PEKINENSIUM PARS POSTERIOR

Ab Anno 1746. ad Annum 1752.

CAPUT I.

ECLIPSES SOLIS ET LUNÆ.

Eclipſis Solis d. 22. Martii 1746. mane.

Temp. ver.									
9^h	16′	40″	Init. Eclip.	O					
0	26	10	Eclip. dig. Sinic.	I	11^h	8′	0″	Eclip. dig. Sin.	VII
0	35	40	— —	II	0	21	0	— —	VI
0	45	50	— —	III	0	31	0	— —	V
0	56	20	— —	IV	0	43	10	— —	IV
10	6	40	— —	V	0	54	0	— —	III
0	17	0	— —	VI	12	5	0	— —	II
0	30	30	— —	VII	0	15	20	— —	I
0	49	0	Max. Eclipſ.	VII 35.′	0	26	0	Finis Eclipſis	O

Superiorem Eclipſim, ægrotante ſupremum anteceſſore meo, obſervavi in ſpecula publica, immiſſa Tubo 6 pedum duabus lentibus inſtructo ſpecie Solis in loco obſcuro, uti moris, in tabulam tubo perpendiculariter oppoſitam, qua machina anteceſſor uti ſolebat. Tabulæ agglutinatum folium album, in quo Diameter Solis per quinque circulos concentricos diviſa in digitos decem more gentis.

Tempora exacta ſunt ad horologium manuale, & ad Sciatericum magnum & bonum, & ad armillam æquatoriam, cujus diameter 6 pedum.

Eclipſis Lunæ totalis d. 20. Jun. 1750. mane.

Temp. ver.				
2^h	58′	0″	Initium Eclipſis	
3	4	10	Ecl. dig. Sinici	I
3	10	30	— —	II
3	17	0	— —	III
3	23	30	— —	IV
3	30	10	— —	V
3	37	0	— —	VI
3	43	40	— —	VII
3	50	40	— —	VIII
3	57	30	— —	IX
4	4	50	Imm. totalis	X

Obſervatio hæc facta eſt a ſocio meo P. Antonio Gogaisl in Obſervatorio publico, tubo 7 pedum inſtructo duabus lentibus & reticulo filari. Tempora exacta ad horologium manuale, quod ante domi ad pendulum compoſitum fuit, & poſt reditum 30 ſecundis ſolum acceleraſſe deprehenſum. Quorum etiam ratio in his Phaſibus adnotandis habita eſt.

Eclipſis Solis d. 25. Maji mane 1751.

Temp. ver.

6^h 42′ 42″ Tubo in Solem directo tardius nempe ob turmam ſpectatorum, notabilis jam in limbo Solis defectus animadverſus: ut adeo

6^h	41′	52″	Initium accidiſſe videatur.
6	48	20	Ecl. dig. Sinici. I
6	55	39	— — II
7	3	48	— — III
7	13	6	— — IV
7	19	58	Luna attigit maculam Solis valde notabilem.
7	20	53	Macula tota tecta
7	33	0	circiter maxima Eclipſis digit. IV 52′
7	51	0	— — IV
7	53	2	Emerſit macula tota
8	1	50	— — III
8	10	23	— — II
8	18	30	— — I
8	26	6	Finis Eclipſis O

Semidiameter Lunæ ante & poſt maximam Eclipſim bis capta erat ad Semidiametrum Solis proxime ut 96 ad 90.

Ab initio Eclipſis usque ad medium ferme cingebatur limbus Lunæ annulo colorato inſtar iridis, duas ferme tertias unius lineæ lato. Sed circa mediam Eclipſim Sole & Luna ad 31° altitudinis elevatis color omnis evanuit, ita ut ad finem uſque Lunæ limbus apparentibus etiam parvis ſuis inæqualitatibus diſtinctiſſime terminaretur.

Tempora exacta ad horologium manuale majuſculum, quod minuta etiam ſecunda exhibet. Hoc porro antea domi compoſitum ad Solem, & hoc ad Solem per altitudines correſpondentes, poſt reditum compertum fuit intra 5 horas tardaſſe 1′ 23″ cumque elapſis diebus alias æquabiliter procederet, habita ratione tardationis correcta ſunt Phaſium momenta.

Eſt autem Obſervatio iſta ſocii P. Ant. Gogaisl facta in Obſervatorio publico ſpecie Solis per tubum 7 pedum intromiſſa loco obſcuro in tabulam perpendiculariter oppoſitam, & quinque circulis concentricis diviſam in decem partes.

Eandem Eclipſim obſervavi in Collegio Micrometro & pendulis ſic:

Temp. ver.

6^h 28′ 0″ Subiit Sol ſupra tectum Eccleſiæ; capta illico & repetitis vicibus Diameter 31′ 42″.

6 42′ 29″ notatus parvus defectus in limbo Solis, ut initium accidiſſe videretur 6^h 42′ 0″ proxime.

h	m	s		dig.	min.	h	m	s		dig.	min.
6	48	13	Ecl. dig. ſin.	0′	56″	7^h	40′	25″	Ecl. dig. ſin.	4°	41′
6	51	19	— —	1	23	7	43	47	— —	4	33
6	54	20	— —	1	40	7	46	27	— —	4	23
6	57	19	— —	2	8	7	48	45	— —	4	11
7	0	19	— —	2	31	7	51	9	— —	3	51
7	3	29	— —	3	1	7	53	22	— —	3	44
7	7	48	— —	3	22	7	55	14	— —	3	36
7	9	49	— —	3	37	7	57	29	— —	3	28
7	14	58	— —	4	9	8	1	47	— —	2	57
7	18	11	— —	4	23	8	4	52	— —	2	40
7	20	8	Luna ad maculam			8	7	2	— —	2	23
7	20	40	texit totam.			8	11	33	— —	1	49
7	23	50	— —	4	39	8	13	15	— —	1	39
7	26	56	— —	4	48	8	14	39	— —	1	30
7	29	17	— —	4	51	8	16	59	— —	1	7
7	32	3	— —	4	52	8	18	46	— —	0	56
7	33	28	— —	4	52	8	20	6	— —	0	45
7	34	53	— —	4	52	8	26	3	Finis Ecl. bene viſus.		

Initium & Finis viſa teleſcopio 14 pedum, reliquæ Phaſes teleſcopio 8 pedum. Micrometrum deſcriptum vide in fine Operis. Valores Revolutionum converſi in digitos & minuta. Digi-

tus pars decima Diametri. Cætera intacti numeri. Pendulum exactum fuerat ad Solem per altitudines correſpondentes 19 Maji & iterum 24 ejuſdem. Tardabat in dies 3″ 42‴ cujus habita ratio, neque vero eodem die, neque poſteris capi denuo poterant altitudines correſpondentes, quia exeundum erat ad 10 leucas obviam Imperatori ex Provinciis auſtralibus reduci.

CAPUT II.

CONGRESSUS LUNÆ CUM PLANETIS ET STELLIS FIXIS.

Anno 1747.

Jan. 1 mane poſt mediam noctem obſervata Luna ad Regulum ſeu Cor Leonis α ♌, quem etiam texit

1^h	46′	0″	Luna alta 59°, capta ejus diameter	31′	48″
1	55	29	α ♌ diſtat a propiore limbo lucido ☾[α]	49	1
2	23	35	— — —	37	43
2	35	49	— — —	33	29
2	49	53	— — —	27	34
3	0	10	— — —	23	30
3	16	44		16	52
4	0	3	Immerſio ſtellæ ſub limbum lucidum ☾[α] in linea recta per medium Grimaldi & limbum inferiorem Copernici viſa teleſcopio 10 pedum.		

OBSERVATIONES
ASTRONOMICÆ.

PARS SECUNDA.

1	57	48	Menelaus in hor.	
2	5	35	β ♉ in hor. — — —	45′ 18″
	7	47		
2	10	9	Menelaus in hor.	
	17	28	β ♉ in hor. — — —	45 52
	7	19		
2	29	6	Menelaus in hor.	
	35	45	β ♉ in hor. — — —	46 47.
	6	39		

Hic numerata a limbo lucido occiduo ☾æ ad maculam Menelaus 46″ penduli,

Eratque macula auſtralior limbo boreo ☾æ 10′ 30″

2	42	0	Capta diameter ☾æ 30′ 21″	

Eodem die Jan. 23 veſpere continuata eadem comparatio ☾æ cum eadem ſtella β ♉, ☾æ ſtellam jam ad ortum prætergreſſa. Igitur

5	10	51	β ♉ in horario.	
	44	14	Limbus propior lucidus ☾æ in horario, & limbus auſtrinus ☾æ auſtralior ſtella — —	39′ 46″
	33	23		

Hic capta Diam. ☾æ 30′ 23″

5	54	21	β in horario.	
5	29	0	Limb. propior luc. ☾æ in hor. & limbus auſtr. ☾æ auſtralior Stella — —	36 41.
	34	39		

6h

OBSERVATIONUM PEKINENSIUM PARS POSTERIOR

Ab Anno 1746. ad Annum 1752.

CAPUT I.

ECLIPSES SOLIS ET LUNÆ.

Eclipſis Solis d. 22. Martii 1746. mane.

Temp. ver.									
9h	16′	40″	Init. Eclip. O						
0	26	10	Eclip. dig. Sinic. I	11h	8′	0″	Eclip. dig. Sin. VII
0	35	40	— — II	0	21	0	— — VI
0	45	50	— — III	0	31	0	— — V
0	56	20	— — IV	0	43	10	— — IV
10	6	40	— — V	0	54	0	— — III
0	17	0	— — VI	12	5	0	— — II
0	30	30	— — VII	0	15	20	— — I
0	49	0	Max. Eclipſ. VII 35.′	0	26	0	Finis Eclipſis O

9	39	0	Stella ϱ ♌ in hor.			
	41	6	Limb. ort. ☾^{a} in h.			
	2	6	Limbus auſtralis ☾^{a} auſtralior ſtella	—	29′	48″
9	47	22	Stella ϱ ♌ in hor.			
	49	43	Limb. ort. ☾^{a} in h.			
	2	21	Limbus auſtralis ☾^{a} auſtralior ſtella	—	31	48
9	51	54	Stella ϱ ♌ in hor.			
	54	20	Limb. ort. ☾^{a} in h.			
	2	26	Limbus auſtralis ☾^{a} auſtralior ſtella	—	32	52
9	56	45	Stella ϱ ♌ in hor.			
	59	19	Limb. ort. ☾^{a} in h.			
	2	34	Limbus auſtralis ☾^{a} auſtralior ſtella	—	34	2
10	2	25	Stella ϱ ♌ in hor.			
	5	9	Limb. ort. ☾^{a} in h.			
	2	44	Limbus auſtralis ☾^{a} auſtralior ſtella	—	35	24
10	9	6	Stella ϱ ♌ in hor.			
	12	1	Limb. ort. ☾^{a} in h.			
	2	55	Limbus auſtralis ☾^{a} auſtralior ſtella	—	36	48
10	14	7	Stella ϱ ♌ in hor.			
	17	13	Limb. ort. ☾^{a} in h.			
	3	6	Limbus auſtralis ☾^{a} auſtralior ſtella	—	37	36.

10^h	19′	29″	Stella ϱ ♌ in hor.	
	22	41	Limb. ort. ☾ª in h.	
	3	12	Limbus auſtralis ☾ª auſtralior ſtella —	38′ 59″
10	25	3	Stella ϱ ♌ in hor.	
	28	26	Limb. ort. ☾ª in h.	
	3	23	Limbus auſtralis ☾ª auſtralior ſtella —	40 12.

Febr. 25 veſpere ☾ª ad ſtellam α ♌, quem etiam occultavit; ſed neque Immerſio viſa, neque Emerſio, ☾ª poſt tectum Eccleſiæ latente. Simul autem ac apparuit

6^h	42′	54″	α in horario.	
	44	0	Limbus occiduus ☾ª in horario.	
	45	56	Macula Ariſtarchus in hor. auſtralior ſtella α ♌	0′ 12″
	3	2	differ. hor. α ♌ ab Ariſtarcho.	
6	49	38	α in hor.	
	50	56	L. occ. ☾ª in hor.	
	52	53	Ariſtarchus in hor. auſtralior ſtella —	1 47
	3	15		
6	55	57	α ♌ in hor.	
	57	28	L. occ. ☾ª in hor.	
	59	24	Ariſtarchus in hor. auſtralior ſtella —	2 57
	3	27		
7	8	0	α ♌ in hor.	
	9	53	L. occ. ☾ª in hor.	

	11′	48″	Ariſtarchus in hor. auſtralior ſtella	—	5′ 33″
	3	48			
7	17	10	α ♌ in hor.		
	19	20	L. occ. ☾ in hor.		
	21	16	Ariſtarchus in hor. auſtralior ſtella	—	7 34
	4	6			
7	26	0	Capta Diam. ☾ 32′ 20″		
7	34	22	α ♌ in hor.		
	37	2	L. occ. in hor.		
	38	58	Ar. in horario auſtralior ſtella α ♌	—	12 35
	4	36			
7	42	39	α ♌ in hor.		
	45	32	L. occ. ☾ in hor.		
	47	28	Ar. in horario auſtralior ſtella α ♌	—	13 13
	4	49			
8	6	28	α ♌ in hor.		
	10	3	L. occ. ☾ in hor.		
	12	0	Ar. in horario auſtralior ſtella α ♌	—	18 40
	5	52			

Nota: cum $7^h\,47'\,28''$ Ariſtarchus in horario decurreret ſuum parallelum, decurrebat limbus boreus ☾, (cum hujus centrum circa horarium eſſet exacte) eundem parallelum, quem decurrebat ſtella α ♌, igitur Ariſtarchus erat auſtralior margine boreo ☾ tantundem, quantum ſtella ſcilicet 13′ 13″.

Dec. 6 veſpere, poſtquam ☾^{ae} texiſſet ♂^{tem}, de quo videre eſt ſuo loco in Congreſſibus Planetarum, obſervata ☾^{e} cum θ ♑, uti ſequitur:

$5^h\ 58'\ 9''$ Stella θ ♑ in horario.
6 3 31 Limbus occiduus ☾^{ae} in hor.
4 23 Cornu boreum ☾^{ae} in hor.
4 58 Cornu auſtrin. ☾^{ae} in hor. eratque limbus auſtrinus ☾^{ae} auſtralior ſtella — — — $34'\ 44''$
6 11 36 θ ♑ in hor.
17 22 L. occ. ☾^{ae} in hor.
18 12 Cornu boreum ☾^{ae} in hor.
18 46 Cornu auſtrin. ☾^{ae} in h. L. ☾^{ae} erat Auſtr. 31 15
6 23 22 θ ♑ in hor.
29 26 L. occ. ☾^{ae} in hor.
30 17 Cornu boreum ☾^{ae} in hor.
52 Cornu auſtrinum ☾^{ae} in hor. limbus auſtrinus ☾^{ae} auſtralior ſtella — — — 28 2
6 38 52 Quædam parva ſtellula propinquans limbo obſcuro ☾^{ae} diſtabat a lucido remotiore — 41 4
7 2 23 Dicta parva ſtella immerſit ſub ☾^{am} diſtans a cornu boreo ☾^{ae} — — — 29 10
Diam. ☾^{ae} $32'\ 38''$.

Dec. 7 veſpere tranſiit ☾^{a} ad boream ſtellæ *e* in tergo Aquarii, &
$8^h\ 5'\ 8''$ Diſtabat ſtella a limbo remotiore ☾^{ae} $51'\ 27''$
20 8 — — — — 51 2
28 52 — — — — 51 2
35 50 Stella in linea cornuum diſtans a cornu remotiore — — — — 51 49.

8^h 41′	30″	Capta Diameter ☾ 32′ 47″.			
47	1	Diſtabat ſtella a limbo propiore ☾	—	20	30.

Anno 1748.

Febr. 9 veſpere obſervata ☾ cum ſtella quadam informi 5ta magnitudinis, quæ in Catalogo Britannico Flamſtedii ſic notatur: *Ptol. In. 10 Reliquarum duarum borealior*: *i. e. Quarta*, & ponitur illic ejus longitudo, ſed reducta ad hoc tempus in ♊ 24° 58′ 58″ cum lat. bor. 4° 8′ 15″. Hanc ſtellam ſub initium noctis ☾ occultatura erat; igitur ſub occaſum Solis capta Diameter ☾ 30′ 22″. Tum comparata ☾ cum ſtella ſic:

5^h 30′	9″	Fuit in horario macula Copernicus.			
31	28	Stella in hor. borealior macula	—	9′	43″
1	19				
5 35	16	Copernicus in hor.			
36	27	Stella in hor. borealior macula	—	9	31
1	11				
5 41	27	Copernicus in hor.			
42	29	Stella in hor. borealior macula	—	9	19
1	2				
5 48	22	Copernicus in hor.			
49	13	Stella in hor. borealior macula	—	8	55.
0	51				

5^h 51′ 44″	Copernicus in hor.			
52 29	Stella in hor. borealior macula	—		8′ 47″
0 45				
5 58 41	Copernicus in hor.			
59 16	Stella in hor. borealior macula	—		8 32
0 35				
6 12 5	Subiit ſtella poſt ☾am e regione ſinus Iridum, qui erat in margine Illuminationis, medius ſolum illuminatus.			
	Interea autem, dum ſtella lateret, decurrente in ſuo filo macula Copernici			
6 41 16	Attigit horarium limbus occiduus ☾e, &			
42 51	Attigit eundem horarium Copernicus borealior limbo auſtrino ☾e	—	—	1 9 4
	Capta denuo Diameter ☾e 30′ 5″.			
	Emergere ſtellam non vidi propter illius parvitatem & clarorem ☾e, quæ cum vertici etiam ſemper magis appropinquaret, nec commoda nec tuta erat obſervatio. Itaque poſtquam tranſiviſſet Meridianum			
8 19 29	Stella in horario.			
23 49	Copernicus in hor. auſtralior ſtella	—		8 38
4 20				
8 29 47	Stella in hor.			
34 26	Copernicus in hor. auſtralior ſtella	—		8 45.
4 39				

8h 42′ 37″	Stella in hor.		
47 34	Copernicus in hor. auſtralior ſtella	—	9 50
4 57			
8 53 34	Stella in hor.		
58 46	Copernicus in hor. auſtralior ſtella	—	10 23
5 12			
9 3 33	Stella in hor.		
9 2	Copernicus in hor. auſtralior ſtella	—	11 0.
5 29			

Maji 2 veſpere comparata ☾ᵃ cum ſtella, quæ eſt in dextro genu Caſtoris ε ♊.

7h 41′ 10″	Limbus lucidus occiduus ☾ᵃ in horario.		
41 36	Stella ε in horario.		
42 16	Cornu auſtrinum ☾ᵃ in horario.		
42 20	Cornu boreum ☾ᵃ in horario.		
	Et tum limbus boreus ☾ᵃ borealior ſtella		41′ 49″
7 50 19	Limb. occid. ☾ᵃ in hor.		
50 29	St. ε in hor.		
51 26	Corn. auſtr. ☾ᵃ in hor.		
51 27	Cornu bor. ☾ᵃ in hor.		
	Limbus boreus ☾ᵃ borealior ſtella	—	40 32
7 57 36	Stella ε in hor.		
57 42	Limb. occ. ☾ᵃ in hor.		
58 37	Cornu auſt. ☾ᵃ in hor.		
58 39	Cornu bor. ☾ᵃ in hor.		
	Limbus boreus ☾ᵃ borealior ſtella	—	39 30.

8h

8^h	6′	34″	St. ε in horario.	
		57	L. ☾æ occid. in hor.	
	7	55	Cornu auſtr. in hor.	
		57	Cornu bor. in hor.	
			— — oblitus notare.	
8	12	12	St. ε in horario.	
	13	52	Cornu auſtr. in hor.	
		54	Cornu bor. in hor.	
			Limbus ☾æ boreus borealior ſtella —	37′ 25″
8	23	20	St. ε in hor.	
	25	19	Cornu auſtr. in hor.	
		22	Cornu bor. in hor.	
			— — — — —	35 45
8	31	17	St. ε in hor.	
	32	27	L. ☾æ occid. in hor.	
	33	32	Cornu auſtr. in hor.	
		35	Cornu bor. in hor.	
			— — — — —	34 42
8	40	4	St. ε in hor.	
	41	33	L. ☾æ occid. in hor.	
	42	36	Cornu auſtr. in hor.	
		39	Cornu bor. in hor.	
			— — — — —	33 39
8	45	36	St. ε in hor.	
	47	14	L. ☾æ occid. in hor.	
	48	19	Cornu auſtr. in hor.	
		21	Cornu bor. in hor.	
			— — — — —	32 46
8	50	29	St. ε in hor.	
	52	18	L. ☾æ occid. in hor.	

$8^h\ 53'\ 23''$ C. a. in hor.
26 C. b. in hor.
— — 32′ 1″
8 55 27 St. ε in hor.
57 56 L. ☾ⁱˢ occid. in hor.
59 2 C. a. in hor.
5 C. b. in hor.
— — 31 17
9 2 31 St. ε in hor.
4 44 L. ☾ⁱˢ occid. in hor.
5 49 C. a. in hor.
51 C. b. in hor.
— — 30 12

9 7 16 St. ε in hor.
10 46 C. a. in hor.
49 C. b. in hor.

Et tum limbus auſtrinus ☾ⁱˢ decurrebat idem filum parallelum fixum, quod decurrebat ſtella ε.

Limbus autem boreus ☾ⁱˢ decurrebat filum parallelum mobile borealior ſtella ε & limbo auſtrino 29′ 46″ adeoque hæc ipſa cenſenda eſt quantitas Diametri ☾ⁱˢ.

Jun. 12 veſpere texit ☾ ſtellam σ ♐. Sed neque Immerſio viſa, neque Emerſio, ☾ nondum ſatis alta.
Sub medium noctis ☾ jam altiore

$11^h\ 18'\ 58''$ Stella σ in horario.
24 59 Ariſtarchus in hor. borealior ſtella 11′ 59″.
25 25 Limbus ☾ⁱˢ ortivus in hor.

11 30 26 St. σ in hor.
36 50 Ar. — 12′ 52″
11 41 18 St. σ in hor.
48 4 Ar. — 13 21
———
6 46
11 54 2 St. σ in hor.
0 1 23 Ar. — 14 22
———
7 11

$0^h\ 5'\ 31''$ St. σ in hor.
13 6 Ar. — 15′ 14″
———
7 35
0 16 5 St. σ in hor.
24 0 Ar. — 16 5.
———
7 55

Porro Ariſtarchus erat occidentalior limbo ortivo ☾æ 16½″ penduli, & auſtralior limbo boreo ☾æ 10′ 2″.

Diameter ☾æ circa mediam noctem erat 33′ 28″.

Jul. 8 veſpere ☾a texit ſtellam quandam informem infra plantam pedis dextri Ophiuchi 4tæ Magnitudinis. Flamſtedius in ſuo Catalogo Britannico ponit eam immediate poſt illam, quam vocat in dextro pede claram ſecundam, in ♐ 17° 33′ 5″ cum latit. auſtr. 4° 54′ 47″ nempe ad annum illum 1690. Et Immerſio quidem hujus ſtellæ viſa, non item Emerſio. Ante Immerſionem

8h	52′	38″	Ariſtarchus in hor.		9h	48′	23″	A.	
	59	33	Stella in horario			53	33	St.	— 6 39
			Ariſt. auſt. 8′ 57″						
	6	55				5	10		
9	3	25	A.		9	56	50	A.	
10		1	St.	— 8 27	10	1	44	St.	— 6 32
	6	36				4	54		
9	13	57	A.		10	5	29	A.	
	20	12	St.	— 7 49		10	8	St.	— 6 12
	6	15				4	39		
9	24	33	A.		10	14	29	A.	
	30	28	St.	— 7 27		18	49	St.	— 6 5.
	5	55				4	20		

10h	25′	0″	A.			11h	6′	59″	A.		
	29	2	St.	—	5′ 58″		9	40	St.	—	5 45
	2	4					2	41			
10	33	58	A.			11	15	54	A.		
	37	41	St.	—	5 53		18	17	St.	—	5 53
	3	43					2	23			
10	41	36	A.			11	21	19	A.		
	45	6	St.	—	5 46		23	32	St.	—	5 49
	3	30					2	13			
10	51	13	A.			11	26	42	A.		
	54	24	St.	—	5 42		28	45	St.	—	6 3
	3	11					2	8			
10	59	25	A.			11	31	41	A.		
11	2	20	St.	—	5 49		33	34	St.	—	5 57
	2	55					Et poſt med. noct. nempe				

Jul. 9 mane

0h 15′ 45″ Stella ſubingreſſa eſt limbum obſcurum ☾æ. Tum vero limbo boreo ☾æ decurrente in filo parallelo fixo numeravi ab appulſu limbi lucidi occidentalis ☾æ ad horarium, uſque ad appulſum Ariſtarchi ad eundem 2′ 10″ penduli. Eratque Ariſtarchus auſtralior limbo boreo ☾æ 12′ 19″.

Circa h. 1 capta Diameter ☾æ 33′ 21″. Quod ad tempora attinet, ea ſunt in hac Obſervatione tempora penduli, & reducenda ad vera. 2da Jul. ex altit.

correſp. fuit ⊙ in Meridie $0^h\ 1'\ 15''$ & 9^a Jul. fuit ⊙ in Merid. item ex altit. correſp. $0^h\ 3'\ 41''$. Emerſio non eſt viſa impedientibus tectorum culminibus.

Aug. 6 veſpere ☾^{a} cum ſtella σ in dextra axilla Sagittarii, quam etiam texit, ſed emerſit ante noctem, ſub hujus autem initium

8^h	$23'$	$50''$	Stella σ in horario.
	27	10	L. occ. ☾^{a} in h. & L.
	———		auſtr.
	3	20	auſtr. ſtel. σ $12'\ 38''$
			Tum poſt longam nubium ſeriem
9	16	26	St. σ in hor.
	21	27	L. occ. ☾^{a} $8'\ 1''$
	———		
	5	1	
9	28	34	St. σ in hor.
	33	57	L. occ. ☾^{a}.
	35	26	Macula Tycho in h. auſtral. ſtel. $2'\ 10''$
9	39	24	St. σ
	46	36	Tycho in hor. auſtr.
	———		ſtella — $1'\ 8''$
	7	12	
9	49	59	St. σ
	57	32	Tycho in h. & in eodem
	———		parallelo cum
	7	33	ſtella.

10^h	$3'$	$27''$	Stella σ in horario
	11	25	Tycho in hor. bo-
	———		real. ſtel. $1'\ 24''$
	7	58	
10	18	50	St. σ
	27	18	Tycho — 3 25
	———		
	8	28	
10	30	43	St. σ
	39	33	Tycho — 4 46
	———		
	8	50	

Momentis temporum ſingulis adde $12''$. Porro Tycho obſervatus borealior limbo auſtrino $4'\ 35''$ & orientalior limbo occiduo ☾^{a} $1'\ 29''$ penduli. Diameter ☾^{a} $33'\ 18''$.

Sept. 1 veſpere ☾ª ad eandem ſtellam informem infra plantam dextri pedis Ophiuchi, ad quam 8va Julii

7^h	$12'$	$46''$	Stella in horario.
	16	49	L. ☾ª occ. in h. & L. auſt. ☾ª auſtralior *ª
	4	3	— — $13'$ $35''$
7	20	21	St. in hor.
	24	39	L. ☾ª occ. 13 31
	4	18	
7	29	49	St.
	34	24	L. ☾ª occ. 13 25
	4	35	
7	36	45	St.
	41	32	L. ☾ª occ. 13 19
	4	47	
7	45	9	St.
	50	13	L. ☾ª occ. 13 3
	5	4	

7^h	$53'$	$1''$	St.
	58	21	L. ☾ª occ. $12'$ $52''$
	5	20	
8	0	24	St.
	5	55	L. ☾ª occ. 12 46
	5	31	
8	12	29	St.
	18	24	L. ☾ª occ. 12 29
	5	55	
8	21	41	St.
	27	53	L. ☾ª occ. 12 2
	6	12	

Diam. ☾ª $32'$ $22''$. Ut fiant tempora vera, adde ubique $49''$.

Sept. 2 veſpere ☾ª ad ſtellam φ in Sagittario. Licet autem longius adhuc diſtarent, cœpi tamen ſub initium noctis obſervare, quod ☾ª deinde ad horizontem deprimeretur. Uſus autem ſum macula Copernicus, cujus & circulus & centrum optime diſtinguebantur.

7h 18′ 35″ Copernicus in horar.
30 52 φ in hor. auſtralior
——— Copernico 1′ 13″
12 17
7 41 25 Copernicus.
53 0 φ — 3 0
———
11 35
7 58 49 Copernicus.
8 9 54 φ — 4 20
———
11 5

8h 12′ 30″ Copernicus.
23 10 φ — 5 11
———
10 40
8 32 30 Copernicus.
42 33 φ — 7 10
———
10 3
8 44 51 Copernicus.
54 33 φ — 8 6
———
9 42

8 59 0 Capta Diam. ☾ª 32′ 52″. Copernicus erat orientalior limbo occ. ☾ª 1′ 38″ penduli, & borealior limbo auſtrino 18′ 5″ circuli. Temporibus adde 1′ 6″.

Sept. 10 veſpere ☾ª ad Stellam ι, quæ eſt infra cornu ſiniſtrum Arietis.

9h 23′ 20″ Stella ι in horario.
30 30 Ariſtarch. in hor. auſtralior ſtel. 20′ 0″
———
7 10
9 36 45 St.
44 33 Ariſtarch. 16 17
———
7 48

9h 48′ 11″ St.
56 22 Ariſt.— 13′ 15″
———
8 11
10 0 33 St.
9 8 A. — 9 48.
———
8 35

10^h 11′ 55″ St.	10^h 24′ 7″ St.
20 51 Ariſt. — 5′ 54″	33 25 Ariſt. — 3′ 46″
8 56	9 18

Porro Ariſtarchus erat occidentalior limbo ☾æ ortivo 33″ penduli, idemque auſtralior limbo ☾æ boreo 4′ 57″ circuli. Diameter ☾æ 31′ 53″.

Die 7 Sept. ⊙ in Merd. 11^h 57′ 31″ & die 14 Sept. ⊙ in Merid. 11^h 55′ 21″ unde corrigenda temporum momenta, ut fiant vera.

Nov. 1 veſpere ſub mediam noctem ☾æ ad ſtellam λ in ♓, quam etiam occultavit.

10^h	53′	37″	Copernicus in horario.
	54	26	Stella λ in hor. auſtralior Copernico 0′ 57″.
	0	49	
10	55	12	Stella λ immerſit ſub parte obſcura ☾æ.
11	6	23	Limbus lucidus occiduus ☾æ in horario.
	7	47	Copernicus in hor. borealior limbo auſtrino ☾æ 22′ 10″.
	1	24	
11	18	47	Capta Diameter ☾æ 32′ 34″.
			Emerſio ſtellæ non eſt viſa. Sed poſt mediam noctem
0	12	0	Diſtabat ſtella a margine propiore lucido ☾æ auſtro-occiduo contra Pitiſcum 2′ 48″.

Anno 1749.

Jan. 7 mane comparata ☾^{æ} cum ſtella ο, quæ eſt in dextro pede Leonis, ſic:

$6^h\ 16'\ 38''$	St. ο in horario.	$6^h\ 46'\ 45''$	St. ο in horario.
21 4	Tycho in h. boreal.	51 57	Tycho in h. boreal.
———	ſtella ο $30'\ 19''$	———	ſtella ο $22'\ 57''$
4 26		5 12	
6 26 50	St. ο in horario.	6 54 45	St. ο in horario.
31 31	Tycho in h. boreal.	7 0 12	Tycho in h. boreal.
———	ſtella ο $27'\ 58''$	———	ſtella ο $21'\ 17''$
4 41		5 27	
6 38 50	St. ο in horario.	7 2 53	St. ο in horario.
43 50	Tycho in h. boreal.	8 33	Tycho in h. boreal.
———	ſtella ο $25'\ 6''$	———	ſtella ο $18'\ 8''$
5 0		5 40	

Erat autem macula Tycho occidentalior limbo ortivo ☾^{æ} $1'\ 9''$ penduli, & borealior auſtrino $4'\ 6''$ circuli.

7 11 20 Capta Diameter ☾^{æ} $29'\ 32''$. Tempora ſunt corrigenda, nempe 2da Jan. ⊙ in Merid. $0^h\ 1'\ 32''$ & 9na Jan. ⊙ in Merid. $0^h\ 3'\ 58''$.

Jan. 22 veſpere ☾^{æ} ad ſtellam λ, quæ eſt in ventre Piſcis Auſtrini.

$6^h\ 41'\ 44''$	Macul. Langren. in h.	$6^h\ 46'\ 47''$	Langrenus in hor.
43 34	St. λ in hor. auſtral.	48 28	St. λ in hor. auſtral.
———	macula $25'\ 57''$	———	macula $27'\ 4''$.
1 50		1 41	

h	′	″	
6	50	55	Langrenus in hor.
	52	28	St. λ in hor. auſtral.
	———		maculâ 28′ 22″
	1	33	
6	57	53	Langrenus in hor.
	59	15	St. λ in hor. auſtral.
	———		maculâ 30′ 17″
	1	22	
7	2	18	Langrenus in hor.
	3	32	St. λ in hor auſtral.
	———		maculâ 31′ 32″
	1	14	

h	′	″	
7	5	45	Langrenus in hor.
	6	53	St. λ in hor. auſtral.
	———		maculâ 32′ 19″
	1	8	
7	19	38	Langrenus in hor.
	20	21	St. λ in hor. auſtral.
	———		maculâ 36 6
	0	43	
7	37	0	Capta Diameter ☾ 33′ 3″.

Porro Langrenus erat orientalior limbo occiduo ☾ 19½″ penduli, & borealior limbo auſtrino 9′ 31″.

Febr. 11 mane comparata ☾ cum duabus ſtellis *b* & *A* in ♏, quarum priorem etiam occultavit.

Sed Emerſio videri non potuit ob lucem diei.

h	′	″	
4	33	27	Mac. Ariſtarch. in h.
	35	14	St. *b* in hor. auſtralior
	———		maculâ 14′ 48″
	1	47	
4	37	57	Mac. Ariſt. in hor.
	39	36	St. *b* in hor. auſtralior
	———		maculâ 14′ 8″
	1	39	
4	41	32	Mac. Ariſt. in hor.
	43	6	St. *b* in hor. auſtralior
	———		maculâ 13′ 43″
	1	34	

h	′	″	
4	45	17	Mac. Ariſt. in hor.
	46	45	St. *b* in hor. auſtralior
	———		maculâ 13′ 14″
	1	28	
4	48	20	Mac. Ariſt. in hor.
	49	43	St. *b* in hor. auſtralior
	———		maculâ 12′ 51″
	1	23	
5	5	19	Mac. Ariſt. in hor.
	6	16	St. *b* in hor. auſtralior
	———		maculâ 10′ 27″.
	0	57	

5h	8′	23″	Mac. Ariſt. in hor.
	9	15	St. b in hor. auſtralior
———			maculâ 10′ 15″
	0	52	
5	11	31	Mac. Ariſt. in hor.
	12	18	St. b in hor. auſtralior
———			maculâ 9′ 46″
	0	47	
5	28	37	Stella b ſubiit limbum lucidum ☾æ e regione Riccioli in linea recta proxime per eundem & Reinholdum.
5	39	0	Capta Diameter ☾æ 31′ 50″. Porro macula Ariſtarchus occidental. limbo ortivo ☾æ 25″ penduli, & borealior limbo auſtrino ☾æ 18′ 18″ circuli. Interea dum ſtella b poſt ☾am lateret, comparabatur ☾a cum ſtella ſequente A in ♏.

5h	49′	29″	Mac. Ariſt. in hor.
	51	57	St. A in hor. boreal.
———			Ariſtarch. 18′ 57″
	2	28	
5	55	52	Mac. Ariſt. in hor.
	58	11	St. A in h. borealior
———			Ariſt. 19′ 57″
	2	19	
6	5	6	Mac. Ariſt. in hor.
	7	9	St. A in h. borealior
———			Ariſt. 20′ 54″
	2	3	
6	16	19	Mac. Ariſt. in hor.
	18	6	St. A in h. borealior
———			Ariſt. 21′ 55″
	1	47	
6	22	24	Mac. Ariſt. in hor.
	24	1	St. A in h. borealior
———			Ariſt. 22′ 33″
	1	37	
6	28	51	Mac. Ariſt. in hor.
	30	17	St. A in h. borealior
———			Ariſt. 23′ 5″.
	1	26	

Sept. 23 veſpere ☾æ ad ſtellam λ in cauda ♑, quam etiam occultavit.

8^h	$41'$	$47''$	Ariſtarchus in hor.	
	44	14	St. λ in h. auſtralior	
			Ariſt.	$1'\ 29''$
	2	27		
8	52	57	Ariſtarchus in hor.	
	55	7	St. λ in h. auſtralior	
			Ariſt.	$4'\ 3''$
	2	10		
9	5	1	Ariſtarchus in hor.	
	6	52	St. λ in h. auſtralior	
			Ariſt.	$7'\ 1''$
	1	51		
9	10	47	Ariſtarchus in hor.	
	12	30	St. λ in h. auſtralior	
			Ariſt.	$8'\ 17''$
	1	43		

9^h	$15'$	$44''$	Ariſtarchus in hor.	
	17	20	St. λ in h. auſtralior	
			Ariſt.	$9'\ 17''$
	1	36		
9	21	20	Ariſtarchus in hor.	
	22	45	St. λ in h. auſtralior	
			Ariſt.	$10'\ 59''$
	1	25		
9	27	34	Ariſtarchus in hor.	
	28	53	St. λ in h. auſtralior	
			Ariſt.	$12'\ 16''$
	1	19		
10^h	$15'$	$58''$	Stella λ immerſa eſt prope limbum auſtrinum.	

Porro Ariſtarchus erat orientalior limbo lucido occiduo ☾^{æ} $1'\ 44''$ penduli, & borealior auſtrino ☾^{æ} $27'\ 1''$. Diameter ☾^{æ} capta $33'\ 43''$.

Oct. 17 veſpere comparata ☾^{a} cum ſtella λ, quæ eſt in arcu Sagitarii

6^h	$35'$	$46''$	Stella λ in horario.	
	36	6	Macula in hor. bor.	
			ſtellâ	$18'\ 24''$
	0	20		
6	43	50	Stella λ in horario.	
	44	25	Macula in hor. bor.	
			ſtellâ	$19'\ 5''$
	0	35		

6	47	30	Stella λ in horario.	
	48	9	Macula in hor. bor.	
			ſtellâ	$19'\ 35''$
	0	39		
6	50	38	Stella λ in horario.	
	51	24	Macula in hor. bor.	
			ſtellâ	$20'\ 3''$.
	0	46		

Eſt autem Macula orientalior limbo occiduo ☾^{a} 35″ pend. & auſtralior boreo 19′ 13″ circuli Diam. ☾^{a} 31′ 22″.

Oct. 21 veſpere texit ☾^{a} ſtellam θ in Aquario, ubi factæ ſunt ſequentes obſervationes comparando ſtellam θ cum macula Copernicus:

6^{h}	13′	11″	Copernicus in hor.
	16	46	St. θ in h. borealior
	———		Copernico 14′ 19″
	3	35	
6	19	27	Copernicus in hor.
	22	52	St. θ in h. borealior
	———		Copernico 13′ 3″
	3	25	
6	25	56	Copernicus in hor.
	29	11	St. θ in h. borealior
	———		Copernico 11′ 25″
	3	15	
6	43	22	Copernicus in hor.
	46	11	St. θ in h. borealior
	———		Copernico 7′ 31″
	2	49	
6	54	45	Copernicus in hor.
	57	15	St. θ in h. borealior
	———		Copernico vacat.
	2	30	
7	3	51	Copernicus in hor.
	6	10	St. θ in h. borealior
	———		Copernico 2′ 37″
	2	19	

7^{h}	14′	22″	Copernicus in hor.
	16	26	St. θ in h. borealior
	———		Copernico 0′ 1″
	2	4	
7	25	16	Copernicus in hor.
	27	3	St. θ in h. auſtralior
	———		Copernico 2′ 19″
	1	47	
7	51	43	Copernicus in hor.
	52	53	St. θ in h. auſtralior
	———		Copernico 8′ 35″
	1	10	
7	55	4	Copernicus in hor.
	56	9	St. θ in h. auſtralior
	———		Copernico vacat.
	1	5	
7	59	52	Copernicus in hor.
8	0	52	St. θ in h. auſtralior
	———		Copernico 10′ 17″
	1	0	
8	6	32	Capta Diam. ☾^{a} 32′ 50″.
8	7	8	Immerſit ſtella, &

			Emerſio viſa non eſt, poſt autem;
9^h	14′	11″	θ in horario.
	15	2½	Copern. in hor. bor.
	———		ſtellâ 29′ 39″
	0	51½	
9	19	17	θ in horario.
	20	17	Copern. in hor. bor.
	———		ſtellâ 30′ 45″
	1	0	
9	23	15	θ in horario.
	24	19	Copern. in hor. bor.
	———		ſtellâ 31′ 45″
	1	4	
9	45	18	θ in horario.
	46	56	Copern. in hor. bor.
	———		ſtellâ 37′ 34″
	1	38	

9^h	50′	7″	θ in horario.
	51	53	Cop. in hor. bor.
	———		ſtellâ 38′ 53″
	1	46	
9	55	6	θ in horario.
	57	0	Copern. in h. bor.
	———		ſtellâ 40′ 28″
	1	54	
10	31	4	θ in horario.
	32	32	Limb. occ. ☾ᵉ in h.
	33	53	Copern. in h. bor.
	———		ſtellâ 50′ 3″
	2	49	
10	37	4	θ in horario.
	38	42	Limb. occ. ☾ᵉ in h.
	40	3	Copern. in h. bor.
	———		ſtellâ 50′ 34″.
	2	59	

Igitur Copernicus orientalior limbo Occiduo ☾ᵉ 1′ 21″ penduli, & borealior limbo auſtrino 20′ 30″ circuli.

Tempora ſunt vera & correcta.

Anno 1750.

Febr. 1 mane comparata ☾ᵉ cum parva quadam ſtella, ſed ſatis lucida, neque etiam tam exigua, quam ea pingitur in Zodiaco ſtellato Flamſt., ubi ponitur in ♏ 24° præciſe cum latitudine auſtrali 4° 6′.

4^{h}	29′	43″	Stella in horario.
	33	11	Cornu auſtr. ☾$^{\alpha}$ in h.
	33	44	Cornu bor. ☾$^{\alpha}$ in h.
	33	46	Copernicus in h.
	34	39	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 43′ 7″
4	41	12	Stella in horario.
	44	53	Cornu auſtr. ☾$^{\alpha}$ in h.
	45	26	Cornu bor. ☾$^{\alpha}$ in h.
	45	28	Copernicus in hor.
	46	20	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 44′ 46″
4	50	56	Stella in horario.
	54	53	Cornu auſtr. ☾$^{\alpha}$ in h.
	55	26	Cornu bor. ☾$^{\alpha}$ in h.
	58	28	Copernicus in hor.
	56	20	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 45′ 51″
5	0	4	Stella in horario.
	4	13½	Cornu auſtr. ☾$^{\alpha}$ in h.
	4	46½	Cornu bor. ☾$^{\alpha}$ in h.
	4	48½	Copernicus in hor.
	5	40½	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 47′ 17″
5	8	23	Stella in horario.
	12	47	Cornu auſtr. ☾$^{\alpha}$ in h.
	13′	20″	Cornu bor. ☾$^{\alpha}$ in h.
	13	24	Copernicus in hor.
	14	34	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 47′ 57″
5	19	7	Stella in horario.
	23	46	Cornu auſtr. ☾$^{\alpha}$ in h.
	24	19	Cornu bor. ☾$^{\alpha}$ in h.
	24	41	Copernicus in h.
	25	33	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 49′ 26″
5	27	59	Stella in horario.
	32	51	Cornu auſtr. ☾$^{\alpha}$ in h.
	33	24	Cornu bor. ☾$^{\alpha}$ in h.
	33	26	Copernicus in h.
	34	18	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 50′ 33″
6	6	23	Stella in horario.
	12	11	Cornu auſtr. ☾$^{\alpha}$ in h.
	12	44	Cornu bor. ☾$^{\alpha}$ in h.
	12	46	Copernicus in h.
	13	38	L. ortivus ☾$^{\alpha}$ in h. & L. auſtr. ☾$^{\alpha}$ auſtralior ſtellâ — 54′ 44″
6	23	50	Stella in horario.
	30	7	Cornu auſtr. ☾$^{\alpha}$ in h.
	30	39	Cornu bor. ☾$^{\alpha}$ in h.
	30	41	Copernicus in hor.

6^h 31′. 33″ L. ortivus ☾^{ae} in h. & L. auſtr. ☾^{ae} auſtralior ſtella — 56′ 21″ Diameter ☾^{ae} capta ſemel 30′ 40″. Iterum 30′ 32″. Tempora omnia ſunt vera & accurate correcta.

Febr. 15 veſpere ſub initium noctis deprehenſa ☾^{a} inter 2 ſtellas, recedens ab occidentaliore accedebat ad orientaliorem, quam etiam occultatura videbatur. Eſt autem orientalior hæc, quæ in Catalogo Britannico Flamſtedii in conſtellatione Tauri notatur de quinque inf. cor. boreum 3^a, 4^a magnitudinis. Quænam autem ſit occidentalior illa, quæ erat minor iſta, non ita certum eſt, ut patet ex differentiis aſcenſionum & declinationum.

10^h	35′	20″	Stella occidentalior in horario.		
	39	53	Limbus ☾^{ae} occiduus in horario.		
	41	23	Macula ☾^{ae} in hor. bor. ſtella occidentaliore	37′	41″
	48	47	Stella orientalior in hor. bor. occidentaliore	36	24
11	4	18	Stella occidentalior in horario.		
	9	48	Limb. ☾^{ae} occid.		
	11	18	Macula ☾^{ae} in hor. bor. ſtella occid.	35′	7″
	17	46	Stella orientaL in hor. boreaL ſtella occid.	36	16
11	39	52	St. occid. in hor.		
	48	2	Macula ☾^{ae} in hor. boreaL ſtella occid.	32	11
	53	19	Stella orient. in h. boreaL ſtella occid.	36	20
11	57	33	Mac. in h. & poſt med. noct. Febr. 16 mane		
0	2	30	Stella orient. in h. boreaL macula	4	50.

0^h

0^h	8$'$	37$''$	Stella occid. in horario.		
	17	48	Macula in hor. bor. ſtellâ occid.	29$'$	25$''$
	22	3	Stella orient. in hor. bor. ſtellâ occid.	36	16
0	27	19	Macula in hor.		
	31	14	Stella orient. in hor. bor. ſtellâ occid.	7	34
0	35	43	Macula in hor.		
	39	19	Stella orient. in hor. bor. ſtellâ occid.	8	30.

Porro Macula ☾^{a} erat Eratoſthenes, erat borealior limbo auſtrino ☾^{a} 20$'$ 5$''$, & auſtralior limbo boreo 10$'$ 55$''$; ceperam autem immediate

0 6 0 Diametrum ☾^{a} 31$'$ 0$''$ præciſe, ☾^{a} tum alta 30°.

Stellarum duarum aſcenſiones differunt 13$'$ 27$''$ penduli, & orientalis borealior eſt occidentali 36$'$ 20$''$ circuli.

Stella igitur occidentalior forte erit illa parvula, quam Flamſtedius in ſuo Zodiaco ſtellato ponit poſt 20° ♊ cum latit. borea 43$'$ circiter.

Tempora ſunt correcta & vera.

Febr. 17 veſpere ☾^{a} ad ſtellam δ, quæ eſt in umbilico Pollucis.

7^h	11$'$	41$''$	Stella δ in horario.		
	18	21	Macula ☾^{a} in hor. auſtr. ſtellâ δ — —	37$'$	4$''$
	6	40			
7	25	27	Stella δ in horario.		
	32	31	Macula ☾^{a} in hor. auſtr. ſtellâ δ — —	38	33.
	7	4			

$7^{h}\ 40'\ 18''$ Stella δ in horario.
47 45 Macula ☾^{æ} in hor. auſtr. ſtellâ δ — — $39'\ 48''$

7 27

8 7 17 Stella δ in horario.
15 23 Macula ☾^{æ} in hor. auſtr. ſtellâ δ — — 42 20

8 6

8 38 0 Capta Diameter ☾^{æ} $30'\ 36''$; ☾^{æ} altâ 70° proxime; macula orientalior limbo occiduo ☾^{æ} $0'\ 59''$ penduli, eademque auſtralior limbo boreo $11'\ 3''$.
Tempora accurrate correcta & vera.

Febr. 20 veſpere ☾^{æ} ad ſtellam ο ♌ in pede ejus dextro anteriore.
$6^{h}\ 37'\ 36''$ Stella ο in horario.
48 16 Mac. in hor. & limbus bor. ☾^{æ} auſtr. ſtellâ $42'\ 19''$.

10 40

Tum capta Diameter ☾^{æ} $29'\ 48''$.
Cum autem parallelus ☾^{æ} a parallelo ſtellæ jam remotior fieret, quam pro tubo 6 pedum, applicui Micrometrum tubo $3\frac{1}{2}$ pedum, eoque cepi primum diametrum Lunæ $29'\ 53''$. Tum

$7^{h}\ 30'\ 28''$ St. ο in horario.
42 34 Mac. in h. & limb. b.
☾^{æ} auſtralior. ſtellâ
12 6 $46'\ 20''$

$7^{h}\ 45'\ 54''$ St. ο in horario.
58 21 Mac. in h. & limb. b.
☾^{æ} a. ſtel. $48'\ 17''$.
12 27

8^h	$1'$	$49''$	St. o in horario.
	14	36	Mac. in h. & limb. b.
	———		☾^{a} a. ſtel. $51'$ $19''$
	12	47	
8	17	39	St. o in horario.
	30	51	Mac. in h. & limb. b.
	———		☾^{a} a. ſtel. 53 39
	13	12	

8^h	$34'$	$10''$	St. o in horario.
	47	56	Mac. in h. & limb. b.
	———		☾^{a} a. ſtel. $54'$ $2''$
	13	46	
8	56	7	St. o in horario.
9	10	7	Mac. in h. & limb. b.
	———		☾^{a} a. ſtel. $1^\circ 0'$ $21''$.
	14	0	

Macula orientalior limbo occid. ☾^{a} $55''$ pend. Tum poſt medium noctis nempe:

Febr. 21 mane tubo ordinario 6 pedum comparata ☾^{a} cum ſtella π in eodem pede ♌.

1^h	$55'$	$23''$	St. π in horario.
	56	53	Mac. ☾^{a} in h. auſtral.
	———		ſtellâ $28'$ $45''$
	1	30	
2	0	31	St. π in horario.
	2	7	Mac. ☾^{a} in h. auſtral.
	———		ſtellâ $29'$ $51''$
	1	36	
2	6	22	St. π in horario.
	8	6	Mac. ☾^{a} in h. auſtral.
	———		ſtellâ $31'$ $1''$
	1	44	
2	10	7	St. π in horario.
	11	56	Mac. ☾^{a} in h. auſtral.
	———		ſtellâ $31'$ $53''$
	1	49	

2^h	$14'$	$36''$	St. π in horario.
	16	32	Mac. ☾^{a} in h. auſtral.
	———		ſtellâ $32'$ $55''$
	1	56	
2	18	56	St. π in horario.
	20	57	Mac. ☾^{a} in h. auſtral.
	———		ſtellâ $33'$ $49''$
	2	1	
2	23	0	St. π in horario.
	25	7	Mac. ☾^{a} in h. auſtral.
	———		ſtellâ $34'$ $44''$.
	1	7	

Hic capta Diameter ☾^{a} $29'$ $56''$.

3^h	7′	4″	St. π in hor.
	8	23	Limb. occ. ☾$^\alpha$ in h. & limb. b. ☾$^\alpha$ auſtralior ſtellâ π 30′ 48″
	10	13	Mac. in h. auſtralior ſtellâ π 44′ 40″. Igitur macula auſtr. limb. b. ☾$^\alpha$ 13′ 52″.
3	50	49	Stella π in horario.
	55	4	Mac. in hor. auſtral.
	———	———	ſtellâ π 54′ 46″
	4	15	

3^h	56′	58″	Stella π in horario.
4	1	22	Mac. in hor. auſtral.
	———	———	ſtellâ π 56′ 1″
	4	24	
4	3	35	Stella π in horario.
	8	13	Mac. in hor. auſtral.
	———	———	ſtellâ π 57′ 25″.
	4	38	

Hic iterum capta Diameter ☾$^\alpha$ 29′ 48″.

Febr. 23 mane poſt mediam noctem comparata ☾$^\alpha$ cum ſtella *e*, in poſteriore pede dextro ♌, quam etiam occultavit.

2^h	6′	41″	Macula in horario.
	7	52	Limb. ortiv. ☾$^\alpha$ in h.
	8	9	St. *e* ♌ in h. auſtral. maculâ 28′ 59″
2	14	2	Macula in horario.
	15	14	Limb. ortiv. ☾$^\alpha$ in h.
		23	St. *e* ♌ in h. auſtral. maculâ 27′ 25″
2	22	18	Macula in horario.
	23	29	Limb. ☾$^\alpha$ ort. & ſtella una præciſe in hor. & hæc auſtralior maculâ 25′ 52″.

2^h	29′	10″	Macula in horario.
	30	13	St. in hor. auſtralior maculâ 24′ 16″
		21	Limb. ort. in hor.

Tum vero, cum ad videndam Immerſionem ſtellæ teleſcopium 14 pedum expediviſſem, cœlum tali nebula obductum, ut eam videre non poſſem, cum tamen & limbum ☾$^\alpha$, & maculas bene diſtinguerem.

Accidit autem idem cum hac eadem ſtella Flamſtedio anno 1676 19 Febr. Grenovici, ut videre eſt in Hiſtoria illius cœleſti Britannica illius anni, ubi etiam addit obſervationem Occultationis hujus ſtellæ Pariſiis factam, & ſibi communicatam.

Diameter ☾ 29′ 25″, & macula borealior limbo auſtrali 18′ 34″.

Mart. 1 mane comparata ☾ cum ſtella σ ♏.

3ʰ	2′	25″	Macula in horario.
	3	26	Limb. ortiv. ☾ in h.
	5	52	St. σ in h. auſtralior maculâ 34′ 27″
3	7	25	Macula in horario.
	8	27	Limb. ortiv ☾ in h.
	10	45	St. σ in h. auſtralior maculâ 34′ 14″
3	12	42	Macula in horario.
	13	43	Limb. ortiv. ☾ in h.
	15	53	St. σ in h. auſtralior maculâ 33′ 46″
3	17	57	Macula in horario.
	18	56	Limb. ortiv. ☾ in h.
	20	59	St. σ in h. auſtralior maculâ 33′ 7″
3	25	32	Macula in horario.
	26	33	Limb. ortiv. ☾ in h.
	28	22	St. σ in h. auſtralior maculâ 32′ 32″.

Hic capta Diam. ☾ 30° 20′ ☾ altâ 22°. Macula bor. limbo auſtr. ☾ 17′ 31″

4ʰ	21′	47″	Macula in horario.
	23	16	St. σ in h. auſtralior maculâ 27′ 14″
	1	29	
4	26	52	Macula in horario.
	28	10	St. σ in h. auſtralior maculâ 26′ 54″
	1	18	
4	31	21	Macula in horario.
	32	36	St. σ in h. auſtralior maculâ 26′ 24″
	1	15	
4	34	21	Macula in horario.
	35	29	St. σ in h. auſtralior maculâ 26′ 22″.
	1	8	

4^h	37′	30″	Macula in horario.
	38	35	St. σ in h. auſtralior
	———		maculâ 25′ 54″
	1	5	
4	42	14	Macula in horario.
	43	14	St. σ in h. auſtralior
	———		maculâ 25′ 23″
	1	0	
4	56	47	Macula in horario.
	57	23	St. σ in h. auſtralior
	———		maculâ 24′ 35″
	0	46	
5	5	30	Macula in horario.
		54	St. σ in h. auſtralior
	———		maculâ 24′ 2″
		24	

5^h	11′	59″	St. σ in horario.
	12	45	L. ort. ☾^{a} in h. & mac.
	———		bor. ** 23′ 28″
	0	46	
5	20	25	St. σ in horario.
	21	24	L. ort. ☾^{a} in h. & mac.
	———		bor. ** 23′ 1″
	0	59	
5	25	2	St. σ in horario.
	26	8	L. ort. ☾^{a} in h. & mac.
	———		bor. ** 22′ 42″
	1	6	
5	33	43	St. σ in horario.
	35	1	L. ort. ☾^{a} in h. & mac.
	———		bor. ** 22″ 15″.
	1	18	

Tempora omnia correcta ſunt & vera.

Mart. 2 mane comparata ☾^{a} cum ſtella θ ad plantam pedis ſiniſtri Ophiuchi.

3^h	57′	42″	Macula in horario.
	58	38	Limb. ort. ☾^{r} in h.
4	4	22	St. θ in h. borealior
			maculâ 41′ 32″
4	12	37	Macula in horario.
	13	32	Limb. ort. ☾^{a} in h.
	18	53	St. θ in h. borealior
			maculâ 42′ 15″

4^h	23′	38″	Macula in horario.
	24	32	Limb. ort. ☾^{a} in h.
	29	35	St. θ in h. borealior
			maculâ 42′ 53″
4	33	11	Macula in horario.
	34	6	Limb. ort. ☾^{a} in h.
	38	54	St. θ in h. borealior
			maculâ 43′ 20″.

4^h	45′	26″	Maculà in horario.
	46	21	Limb. ort. ☾ª in h.
	50	50	St. θ in h. borealior maculà 43′ 53″
4	54	55	Macula in horario.
	55	50	Limb. ort. ☾ª in h.
5	0	2	St. θ in h. borealior maculà 44′. 23″. Hic capta Diam. ☾ª 30′ 42″ ☾ª altà 21° & macula bor. limbo auſtr. ☾ª 16′ 39″
5	13	29	Macula in horario.
	14	24	Limb. ort. ☾ª in h.
	18	6½	St. θ in h. borealior maculà 44′ 59″
5	21	13	Macula in horario.
	22	8	Limb. ort. ☾ª in h.
	25	40	St. θ in h. borealior maculà 45′ 9″
5	36	19	Macula in horario.
	37	14	Limb. ort. ☾ª in h.
	40	22	St. θ in h. borealior maculà 45′ 34″
5^h	50′	36″	Macula in horario.
	51	31	Limb. ort. ☾ª in h.
	54	17	St. θ in h. borealior maculà 45′ 42″
6	1	16½	Macula in horario.
	2	12	Limb. ort. ☾ª in h.
	4	41	St. θ in h. borealior maculà 45′ 52″
6	6	22	Macula in horario.
	7	18	Limb. ort. ☾ª in h.
	9	38	St. θ in h. borealior maculà 46′ 2″
6	10	59	Macula in horario.
	11	54	Limb. ort. ☾ª in h.
	14	9	St. θ in h. borealior maculà 46′ 0″
6	15	26	Macula in horario.
	16	22	Limb. ort. ☾ª in h.
	18	28	St. θ in h. borealior maculà 46′ 3″.

Tempora ſunt correcta & vera.

Mart. 3 mane comparata ☾ª cum ſtella λ in arcu ♐.

5^h	28′	59″	Macula in horario.
	29	51	Limb. ort. ☾ª in h.
	40	58	St. λ in h. auſtralior maculà 29′ 16″
5^h	43′	16″	Macula in horario.
	44	8	Limb. ort. ☾ª in h.
	54	51	St. λ in h. auſtralior maculà 29′ 25″.

Porro macula borealior limbo auſtrino ☾æ 16′ 20″.
Diameter ☾æ 31′ 7″, alt. ☾æ 20°. Tempora ſunt vera.

Mart. 11 veſpere comparata ☾æ cum ſtella π in ♈, licet ſatis adhuc diſtans ab illa in aſcenſione recta.

6h	18′	12″	Macula in horario.		
	33	53	Una ſtellulà in hor. auſtralior maculà	10′	17″
	47	11	Alia ſtellula in hor. auſtralior maculà	3	26
	52	8	St. π ♈ in hor. auſtralior maculà	20	24
6	58	32	Macula in hor.		
7	31	7	St. π in hor. auſtralior maculà	25	52.
	32	35			

7h	34′	25″	Macula in horario.	8h	48′	8″	Macula in horario.
8	5	42	St. π in h. auſtralior maculà 30′ 36″	9	16	36	St. π in h. auſtralior maculà 38′ 24″.
	31	17			28	28	

Macula orientalior limbo occiduo ☾æ 32″ penduli, & borealior limbo auſtrino 6′ 7″.

Diameter ☾æ 31′ 42″, ☾æ alta 17°. Mora ☾æ in horario 2′ 23″ penduli.

Mart. 12 veſpere ſtabat ☾æ ſupra ſtellas ζ & τ in cauda Arietis recedens ab illa, & ad hanc accedens, cum qua etiam ob ſitum commodius comparari poterat. Itaque capta prius Diametro ☾æ 32′ 36″; alta tum 50°, & determinata illius mora in horario 2′ 24″ penduli.

6h

6^h	$34'$	$22''$	Macula in hor.
39	35		St. τ in h. auſtralior maculâ $29'$ $36''$

6^h	$42'$	$34''$	Macula in hor.
47	32		St. τ in h. auſtralior macûlà $30'$ $20''$.
4	58		

Videbam autem aliam ſtellulam occidentaliorem ☾^{a}, cum qua, omiſſa priore, cœpi comparare ☾^{am} uſus eadem macula ſic:

7^h	$12'$	$22''$	Stellula in horario.
	14	3	Limb. occid. in h.
		41	Mac. in hor. boreal. ſtellulâ $40'$ $22''$
7	17	49	Stellula in horario.
	19	42	Limb. occid. in h.
	20	21	Mac. in hor. boreal. ſtellulâ $40'$ $47''$
7	22	26	Stellula in horario.
	24	30	Limb. occid. in h.
	25	9	Mac. in hor. boreal. ſtellulâ $41'$ $3''$
7	30	39	Stellula in horario.
	33	0	Limb. occid. in h.
		38	Mac. in hor. boreal. ſtellulâ $41'$ $41''$
7	37	43	Stellula in horario.
	40	14	Limb. occid. in h.
		53	Mac. in hor. boreal. ſtellulâ $42'$ $11''$

7^h	$44'$	$28''$	Stellula in horario.
	47	21	Limb. occid. in h.
		59	Mac. in hor. boreal. ſtellulâ $42'$ $44''$
7	52	54	Stellula in horario.
	56	9	Limb. occid. in h.
		48	Mac. in hor. boreal. ſtellulâ $43'$ $16''$
8	4	57	Stellula in horario.
	8	37	Limb. occid. in h.
	9	18	Mac. in hor. boreal. ſtellulâ $43'$ $55''$
8	14	57	Stellula in horario
	18	55	Limb. occid. in h.
	19	34	Mac. in hor. boreal. ſtellulâ $44'$ $33''$.

Porro nec in Zodiaco ſtellato Flamſtedii, nec in ejus Catalogo Britannico ullam reperire eſt ſtellam, quæ iſthuc quadret; quare comparanda ea erit cum vicina ſtella τ.

6h	29'	10"	Stella *H* in horario, prope meridianum.		
	41	10	Limbus occiduus ☾æ in hor. & limbus auſtrinus ☾æ borealior ſtellâ — —	17'	13"
	12	0			
9	8	59	Stella *H* in horario.		
	24	22	Macula in horario borealior ſtellâ	26	50
	15	23			
9	54	3	Stella *H* in horario.		
10	11	11	Macula in hor. & limbus boreus ☾æ auſtr.**	29	31
	17	8	Macula hæc oriental. erat limbo occiduo ☾æ penduli. Tum vero	1	19
10	24	4	Stella ν in horario.		
	29	39	Limbus occid. ☾æ in hor.		
	30	44	Macula in hor. borealior ſtellâ ν	42	53
	32	5	Stella μ in horario.		
10	52	21	Stella ν in horario.		
	59	57	Limbus occid. ☾æ in hor.		
11	0	23	Stella μ in hor.		
	1	1	Macula in hor. boreal. ſtellâ ν	39	17
11	58	57	Stella ν in horario.		
	16	59	Stella μ in horario.		
	17	8	Limbus occid. ☾æ in hor.		
	18	12	Macula in hor. borealior ſtellâ ν	37	4.

Porro macula hæc non eſt illa, cum qua comparavi ſtellam *H*, ſed alia orientalior limbo ☾æ occiduo 1' 4" penduli, & borealior limbo auſtrino 4' 50". Diam. ☾æ 30' 43". Mora ejus in hor. 2' 19", alt. ☾æ 29°.

11^h	$48'$	$35''$	Stella μ in hor.	
	49	53	Limbus occid. in hor.	
	50	58	Macula in hor. borealior ſtellâ μ	$29'$ $2''$
11	59	16	Stella μ in hor. & poſt med. noctem Mart. 16 mane	
0	1	1	Limbus occid. in hor.	
	2	5	Macula in hor. borealior ſtellâ μ	$27'$ $27''$
0	5	28	Stella μ in hor.	
	7	27	Limbus occid. in hor.	
	8	31	Macula in hor. borealior ſtellâ μ	26. 47.

Et Macula hæc eadem eſt, quæ comparata fuit cum ſtella ν.

Mart. 16 veſpere comparata ☾ª cum ſtella δ ♊ in umbilico Pollucis. Diam. ☾ª $30'$ $40''$; ☾ª alta 68°.

6^h	$11'$	$57''$	Macula in horario.
	20	49	St. δ in h. borealior
———			maculâ $13'$ $18''$
	8	52	
6	25	11	Macula in horario.
	33	44	St. δ in h. borealior
———			maculâ $14'$ $18''$
	8	33	
6	36	45	Macula in horario.
	45	2	St. δ in h. borealior
———			maculâ $15'$ $23''$
	8	17	
6	51	30	Macula in horario.
	59	25	St. δ in h. borealior
———			maculâ $16'$ $49''$
	7	55	

8^h	$18'$	$23''$	Macula in horario.
	24	12	St. δ in h. borealior
———			maculâ $25'$ $57''$
	5	49	
8	27	20	Macula in horario.
	32	58	St. δ in h. borealior
———			maculâ $26'$ $54''$
	5	38	
8	37	49	Macula in horario.
	43	11	St. δ in h. borealior
———			maculâ $28'$ $20''$.
	5	22	

Hic capta denuo ☾ª Diameter $30'$ $34''$. Mora ejus in hor. $2'$ $17''$ pend. ☾ª alta 58°.

9^h 25′ 48″ Macula in horario.
29 58 St. δ in h. borealior
——— maculâ 34′ 46″
4 10
9 34 9 Macula in horario.
38 6 St. δ in h. borealior
——— maculâ 35′ 47″
3 57

9^h 42′ 5″ Macula in horario.
45 50 St. δ in h. borealior
——— maculâ 37′ 4″.
3 45
Macula orientalior limbo occid. ☾ª 1′ 17″ pend. & auſtralior limbo boreo 6′ 59″ circuli.

Mart. 17 veſpere ☾ª occultavit ſtellam ζ ♋ cum qua ante comparata ſic:

6^h 16′ 32″ Macula in horario.
24 58 St. ζ in h. auſtralior
——— maculâ 52′ 9″
8 26
6 28 13 Macula in horario.
36 25 St. ζ in h. auſtralior
——— maculâ 51′ 4″
8 12
6 39 41½ Macula in horario.
47 37 St. ζ in h. auſtralior
——— maculâ 49′ 48″
7 55½
8 7 11 Macula in horario.
13 11 St. ζ in h. auſtralior
——— maculâ 38′ 12″
6 0

8^h 43′ 54″ Macula in horario.
49 2 St. ζ in h. auſtral.
——— maculâ 32′ 45″
5 8
9 4 21 Macula in horario.
9 4 St. ζ in h. auſtral.
——— maculâ 29′ 41″
4 43
9 28 6 Macula in horario.
32 17 St. ζ in h. auſtral.
——— maculâ 25′ 49″
4 11
9 57 46 Macula in horario.
10 1 16 St. ζ in h. auſtral.
——— maculâ 20′ 57″.
3 30

10^h	$15'$	$15''$	Macula in horario.
	18	19½	St. ζ in h. auſtral.
			maculâ 16′ 49″
	3	4½	
10	38	24	Macula in horario.
	40	55	St. ζ in h. auſtral.
			maculâ 13′ 50″
	2	31	
10	48	0	Macula in horario.
	50	18	St. ζ in h. auſtral.
			maculâ 12′ 8″
	2	18	
10	54	45	Macula in horario.
	56	53	St. ζ in h. auſtral.
			maculâ 10′ 56″
	2	8	
11	4	43	Macula in horario.
	6	35	St. ζ in h. auſtral.
			maculâ 9′ 4″
	1	52	
11	11	4	Macula in horario.
	12	47	St. ζ in h. auſtral.
			maculâ 7′ 54″
	1	43	

11^h	$17'$	$10''$	Macula in horario.
	18	43	St. ζ in h. auſtral.
			maculâ 6′ 45″
	1	33	
11	28	31	Macula in horario.
	29	46	St. ζ in h. auſtral.
			maculâ 4′ 36″
	1	15	
11	32	40	Macula in horario.
	33	48	St. ζ in h. auſtral.
			maculâ 3′ 53″
	1	8	
11	37	12	Macula in horario.
	38	13	St. ζ in h. auſtral.
			maculâ 2′ 56″
	1	1	
11	41	54	Macula in horario.
	42	49	St. ζ in h. auſtral.
			maculâ 2′ 8″.
	0	55	

11 48 11 Stella ζ immerſa diſparuit, viſa clare & tuto citra errorem vel unius ſecundi.

Dum ſtella latet, determinata macula orientalior limbo occiduo ☾ 1′ 27″ penduli, & auſtralior limbo boreo ☾ 12′ 43″ circuli.

Diameter ☾^{æ} capta 29′ 49″. Mora ejus in hor. 2′ 9″ penduli. ☾^{æ} tum alta 33°.

Porro cum immerſionem vidiſſem tubo 6 pedum, utpote in limbo obſcuro ☾^{æ}, Emerſionem nec tubo 13 pedum vidi, niſi 12^{h} 47′ diſtantem jam a limbo 2′ vel 3′ tum propter clarorem ☾^{æ} & ſtellæ exilitatem, tum etiam, quod eam paullo alibi exſpectarem. Tum vero reſumpto tubo 6 pedum proſecutus Obſervationem ſic:

Mart. 18 mane poſt med. noctem

1^{h}	1′	26″	St. ζ in horario.	1^{h}	22′	4″	St. ζ in horario.
	2	52	Mac. in h. auſtralior		24	12	Mac. in h. auſtralior
	———		ſtellâ 13′ 26″		———		ſtellâ 17′ 56″
	1	26			2	8	
1	10	16	St. ζ in horario.	1	28	33	St. ζ in horario.
	12	0	Mac. in h. auſtralior		30	52½	Mac. in h. auſtralior
	———		ſtellâ 15′ 19″		———		ſtellâ 19′ 13″
	1	44			2	19½	
1	16	12	St. ζ in horario.	1	34	36	St. ζ in horario.
	18	6	Mac. in h. auſtralior		37	8	Mac. in h. auſtralior
	———		ſtellâ 16′ 32″		———		ſtellâ 20′ 7″.
	1	54			2	32	

Mart. 18 veſpere ☾^{æ} ad ſtellam ο majuſculam in ♋ & primum capta Diameter ☾^{æ} 29′ 52″. ☾^{æ} tum alta 45°. Mora ☾^{æ} in horario 2′ 8″ penduli.

6^{h}	25′	32″	Macula in horario.	6^{h}	34′	39″	Macula in horario.
	29	31	St. ο in h. borealior		38	28	St. ο in h. borealior
	———		maculâ 44′ 48″		———		maculâ 45′ 56″.
	3	59			3	49	

6^{h}

6^h 48′ 59″ Macula in horario.	7^h 23′ 19″ Macula in horario.
52 29 St. ο in h. borealior	26 4 St. ο in h. borealior
——— maculâ 48′ 4″	——— maculâ 53′ 5″
3 30	2 45
6 54 42 Macula in horario.	7 28 33 Macula in horario.
58 5 St. ο in h. borealior	31 11 St. ο in h. borealior
——— maculâ 48′ 58″	——— maculâ 53′ 56″.
3 23	2 38

Macula orientalior limbo occiduo ☾ae 1′ 33″ penduli, & auſtralior limbo boreo 14′ 47″ circuli.

Mart. 29 mane obſervando ♄um viſa ☾a prope parallelum ſtellæ α ♏ cordis Scorpionis. Itaque tentavi

3^h 58′ 50″ α ♏ in horario.
4 29 17 Limb. ortivus ☾ae in hor. & limbus auſtrinus ☾ae borealior ſtellâ — — — 30′ 20″.
———
30 27
Diameter ☾ae proxime ad meridianum 30 51.
4 55 54 α ♏ in horario.
5 27 52 Limb. ortivus ☾ae in hor. & limb. auſtr. borealior ſtellâ — — — 29 17.
———
31 58

Mart. 30 mane comparata ☾a cum ſtella maxime occidentali trium, quæ ſunt ante arcum Sagittarii.

3^h 7′ 22″ Macula in horario.	3^h 22′ 39″ Macula in horario.
17 26 St. in hor. borealior	32 17 St. in hor. borealior
——— maculâ 41′ 59″	——— maculâ 42′ 11″.
10 4	9 38

3h	37′	43″	Macula in horario.
	46	58	St. in hor. borealior
	——	——	maculâ 42′ 28″
	9	15	
4	3	1	Macula in horario.
	4	18	Limb. ort. ☾æ in h.
	11	35	St. in hor. borealior
	——	——	maculâ 42′ 19″
	8	34	
4	13	42	Macula in horario.
	14	59	Limb. ort. ☾æ in h.
	21	59	St. in hor. borealior
	——	——	maculâ 42′ 21″
	8	17	
4	23	42	Macula in horario.
	31	45	St. in hor. borealior
	——	——	maculâ 42′ 17″
	8	3	
4	34	13	Macula in horario.
	35	30	Limb. ort. ☾æ in h.
	41	59	St. in hor. borealior
	——	——	maculâ vacat
	7	46	

4h	43′	31″	Macula in horario.
	51	3	St. in hor. borealior
	——	——	maculâ 41′ 51″
	7	32	
4	54	10	Macula in horario.
	55	26	Limb. ort. ☾æ in h.
5	1	25	St. in hor. borealior
	——	——	maculâ 41′ 39″
	7	15	
5	3	0	Macula in horario.
	10	2	St. in hor. borealior
	——	——	maculâ 41′ 27″
	7	2	
5	11	37	Macula in horario.
	18	26	St. in hor. borealior
	——	——	maculâ 41′ 4″
	6	49	
5	19	48	Macula in horario.
	21	6	Limb. ort. ☾æ in h.
	26	25	St. in hor. borealior
	——	——	maculâ 40′ 55″.
	6	37	

Diameter ☾æ 31′ 12″; ☾æ alta 26°. Macula borealior limbo auſtrino ☾æ 23′ 52″ circuli, & occidentalior limbo ortivo 1′ 17″ penduli.

Mart. 31 mane comparata ☾æ cum 2 ſtellulis gemellis, quæ ſunt infra oculum ſiniſtrum Sagittarii in Zodiaco ſtellato

Flamſtedii, & primum cum occidentaliore earum ſolum, deinde cum ambabus:

h	'	''	
3^h	35'	22''	Macula in horario.
	39	5	St. occ. in h. boreal.
	———		maculâ 43' 31''
	3	43	
3	41	46	Macula in horario.
	45	19	St. occ. in h. boreal.
	———		maculâ 43' 14''
	3	33	
3	49	0	Macula in horario.
	52	21	St. occ. in h. boreal.
	———		maculâ 42' 42''
	3	21	
3	54	57	Macula in horario.
	56	4	L. ort. ☾$^{\alpha}$ in hor.
	58	7	St. occ. in h. boreal.
	———		maculâ 42' 46''
	3	10	
4	1	45	Macula in horario.
	41	45	St. occ. in h. boreal.
	———		maculâ 42' 30''
	3	0	
4	8	1	Macula in horario.
	9	8	L. ort. ☾$^{\alpha}$ in hor.
	10	50	St. occ. in h. boreal.
			maculâ 42' 9''
	11	46	St. orient. in hor.
	———		
	2	49	

h	'	''	
4^h	16'	18''	Macula in horario.
	17	25	L. ort. ☾$^{\alpha}$ in hor.
	18	53	St. occ. in h. boreal.
			maculâ 41' 50''
	19	49	St. orient. in hor.
	———		
	2	35	
4	23	46	Macula in horario.
	26	8	St. occ. in h. boreal.
	———		maculâ 41' 35''
	2	22	
4	32	21	Macula in horario.
	34	33	St. occ. in h. boreal.
			maculâ 41' 1''
	35	29	St. orient. in hor.
	———		
	2	12	
4	39	53	Macula in horario.
	41	51	St. occ. in h. boreal.
			maculâ 40' 36''
	42	48	St. orient. borealior maculâ 44' 48''.

Igitur ſtella orientalior borealior occidentaliore 4' 12''.

4^h	48′	54″	Macula in horario.
	50	36½	St. occ. in h. boreal.
	———		maculâ 40′ 5″
	1	42½	
4	54	3	Macula in horario.
	55	38	St. occ. in h. boreal.
	———		maculâ 39 45″
	1	35	
5	1	1	Macula in horario.
	2	29	St. occ. in h. boreal.
			maculâ 39′ 23″
	2	26	St. or. bor. maculâ.
	———		
	1	25	

5^h	12′	49″	Macula in horario.
	14	34	St. occ. in h. boreal.
			maculâ 38′ 34″
	14	36	L. ort. ☾^{a} in hor.
	———		
	1	5	
5	19	35	Macula in horario.
	20	30	St. occ. in h. boreal.
			maculâ 38′ 5″
	20	43	L. ort. ☾^{a} in hor.
	———		
	0	55	

Macula auſtralior limbo boreo ☾^{a} 11′ 52″ circuli.

Diameter ☾^{a} 31′ 23″; ☾^{a} alta 25°.

April. 12 veſpere ☾^{a} cum ſtella δ ♊ in umbilico Pollucis.

8^h	41′	0″	Macula in horario.
9	4	26	St. δ in h. borealior
	———		maculâ 20′ 11″
	23	26	
9	7	14	Macula in horario.
	29	52	St. δ in h. borealior
	———		maculâ 24′ 19″
	22	38	
9	33	25	Macula in horario.
	55	11	St. δ in h. borealior
	———		maculâ 28′ 22″
	21	46	

9^h	57′	55″	Macula in horario.
10	18	52	St. δ in h. borealior
	———		maculâ 31′ 42″
	20	57	
10	33	42	Macula in horario.
	53	26	St. δ in h. borealior
	———		maculâ 37′ 40″
	19	44	
10	55	37	Macula in horario.
11	14	34	St. δ in h. borealior
	———		maculâ 41′ 10″.
	18	57	

$11^h\ 19'\ 12''$ Macula in horario.
37 17 St. δ in hor. borealior maculâ $44'\ 54''$.

18 5

Macula erat orientalior limbo occiduo ☾^{e} $46''$ penduli, & auſtralior limbo boreo $18'\ 55''$.

Diameter ☾^{e} $31'\ 25''$; ☾^{e} alta $24°$.

April. 13 veſpere comparata ☾^{e} cum ſtella *l* in ♊ primum, tum cum ſtella ζ in ♋.

$9^h\ 2'\ 59''$ Macula in horario.
6 57 Stella *l* in hor. borealior maculâ $54'\ 11''$

3 58

9 9 24 Macula in horario.
13 11 St. *l* in hor. boreal. maculâ $55'\ 22''$

3 47

9 15 14 Macula in horario.
18 51 St. *l* in hor. boreal. maculâ $56'\ 25''$

3 37

$9^h\ 21'\ 6''$ Macula in horario.
24 36 St. *l* in hor. boreal. maculâ $57'\ 31''$

3 30

9 28 11 Macula in horario.
31 27 St. *l* in hor. boreal. maculâ $58'\ 43''$.

3 16

Erat autem Macula hæc orientalior limbo occiduo ☾^{e} $1'\ 18''$ penduli, & auſtralior limbo boreo $4'\ 26''$ circuli. Diameter ☾^{e} $31'\ 13''$ in altit. $38°$. Mora ☾^{e} in hor. $2'\ 16''$ penduli. Tum

10ʰ	0′	9″	Macula in horario.
	19	35	St. ζ in h. boreal.
	———		maculâ 42′ 42″
	19	26	
10	22	45	Macula in horario.
	41	31	St. ζ in h. boreal.
	———		maculâ 38′ 28″
	18	46	
10	47	22	Macula in horario.
11	5	23	St. ζ in h. boreal.
	———		maculâ 33′ 52″
	18	1	
11	19	35	Macula in horario.
	36	35	St. ζ in h. boreal.
	———		maculâ 27′ 40″
	17	0	
11	42	51	Macula in horario.
	59	5	St. ζ in h. boreal.
	———		maculâ 23′ 11″.
	16	14	

Macula autem hæc erat orientalior limbo occiduo ☾ 53″ penduli, & auſtralior limbo boreo 25′ 50″.

April. 14 veſpere ☾ cum ſtella ο in ♋.

8ʰ	38′	4″	Macula in horario.
	53	49	St. ο in h. borealior
	———		maculâ 7′ 30″
	15	45	
8	57	46	Macula in horario.
9	13	3	St. ο in h. borealior
	———		maculâ 11′ 12″
	15	17	
9	17	19	Macula in horario.
	32	8	St. ο in h. borealior
	———		maculâ 14′ 54″
	14	49	
9	38	58	Macula in horario.
	53	18	St. ο in h. borealior
	———		maculâ 19′ 15″
	14	20	
10ʰ	0′	59″	Macula in horario.
	14	49	St. ο in h. borealior
	———		maculâ 23′ 44″
	13	50	
10	17	40	Macula in horario.
	31	4	St. ο in h. boreal.
	———		maculâ 26′ 50″
	13	24	
10	33	38	Macula in horario.
	46	36	St. ο in h. boreal.
	———		maculâ 30′ 15″
	12	58	
10	58	34	Macula in horario.
11	10	55	St. ο in h. boreal.
	———		maculâ 35′ 37″.
	12	21	

Macula orientalior limbo occiduo ☾ᵃ 1′ 26″ penduli, & auſtralior limbo boreo 6′ 12″ circuli. Diam. ☾ᵃ 30′ 34″. Mora ejus in horario 2′ 10″ penduli; alt. ☾ᵃ 35°.

April. 15 veſpere comparata ☾ᵃ cum ſtella ξ ♌ primum, deinde cum ſtella ο ♌ utendo macula eadem.

7ʰ	26′	57″	Macula in horario.	
	31	24	St. ξ in h. borealior	
	———		maculâ	19′ 59″
	4	27		
7	42	49	Macula in horario.	
	46	57	St. ξ in h. borealior	
	———		maculâ	22′ 57″
	4	8		
7	53	38	Macula in horario.	
	57	35½	St. ξ in h. borealior	
	———		maculâ	24′ 43″
	3	57½		
8	4	44	Macula in horario.	
	8	28	St. ξ in h. borealior	
	———		maculâ	26′ 45″
	3	44		
8	12	31	Macula in horario.	
	16	16	St. ξ in h. borealior	
	———		maculâ	28′ 14″
	3	35		
8	29	3	Macula in horario.	
	32	18	St. ξ in h. borealior	
	———		maculâ	31′ 38″
	3	15		

8ʰ	51′	0″	Macula in horario.	
	53	49	St. ξ in h. boreal.	
	———		maculâ	35′ 52″
	2	49		
9	16	11	Macula in horario.	
	18	26	St. ξ in h. boreal.	
	———		maculâ	41′ 3″
	2	15		
9	25	45	Macula in horario.	
	27	52	St. ξ in h. boreal.	
	———		maculâ	42′ 42″
	2	7		
9	35	11	Macula in horario.	
	37	7	St. ξ in h. boreal.	
	———		maculâ	44′ 55″
	1	56		
9ʰ	45′	6″	Mac. ead. in hor.	
	56	2	St. ο in h. auſtral.	
	———		maculâ	36′ 18″
	10	56		
10	2	23	Mac. ead. in hor.	
	12	58	St. ο in h. auſtral.	
	———		maculâ	32′ 44″.
	10	35		

$10^h\ 17'\ 45''$ Mac. ead. in hor.
28 0 St. o in h. auſtral.
——— maculâ 29′ 28″
10 15
10 31 35 Mac. ead. in hor.
41 33 St. o in h. auſtral.
——— maculâ 26′ 37″
9 58
10 43 37 Mac. ead. in hor.
53 16 St. o in h. auſtral.
——— maculâ 24′ 8″
9 39
11 17 59 Mac. ead. in hor.
26 52 St. o in h. auſtral.
——— maculâ 17′ 59″
8 53

$11^h\ 32'\ 2\frac{1}{2}''$ Mac. ead. in hor.
40 35 St. o in h. auſtral.
——— maculâ 13′ 47″
8 $32\frac{1}{2}$
11 45 14 Mac. ead. in hor.
53 24 St. o in h. auſtral.
——— maculâ 10′ 59″
8 10
11 56 44 Mac. ead. in hor.
12 4 39 St. o in h. auſtral.
——— maculâ 8′ 33″.
7 55

Macula orientalior limbo occid. ☾^{ae} 1′ 22″ pend. & auſtralior limbo boreo 14′ 4″ circuli.

Diameter ☾^{ae} 30′ 29″. Mora in hor. 2′ $6\frac{1}{2}''$ penduli; ☾^{ae} alt. 37°.

April. 19 veſpere ☾^{a} ad ſtellam χ in ♍.

$7^h\ 19'\ 23''$ Macula in horario.
34 20 St. χ in h. borealior
——— maculâ 26′ 27″
14 57
7 41 19 Macula in horario.
55 57 St. χ in h. borealior
——— maculâ 31′ 7″
14 38

$8^h\ 50'\ 40''$ Macula in horario.
9 3 46 St. χ in h. borealior
——— maculâ 45′ 51″
13 6
9 6 45 Macula in horario.
19 33 St. χ in h. borealior
——— maculâ 49′ 4″.
12 48

Macula

Macula orientalior limbo occid. ☾æ 1′ 48″ penduli, & auſtralior limbo boreo 14′ 57″ circuli.

Diameter ☾æ 29′ 56″. Mora in hor. 2′ 3″ pend.; ☾æ alt. 42°.

April. 24 mane poſt mediam noctem comparata ☾a cum ſtella δ in ♏, teleſcopio 3 pedum, quia ordinarium 6 pedum non capiebat ambos parallelos.

1h	32′	21″	Macula in horario.	3h	0′	20″	Macula in horario.
	46	27	St. δ in h. borealior		12	19	St. δ in h. borealior
	———		maculâ 59′ 36″		———		maculâ 1° 5′ 39″
	14	6			11	59	
1	50	47	Macula in horario.	3	17	29	Macula in horario.
2	4	27	St. δ in h. borealior		29	6	St. δ in h. borealior
	———		maculâ 1° 1′ 7″		———		maculâ 1° 6′ 33″
	13	40			11	37	
2	8	59	Macula in horario.	3	47	13	Macula in horario.
	22	15	St. δ in h. borealior		58	6	St. δ in h. borealior.
	———		maculâ 1° 2′ 39″		———		maculâ 1° 7′ 45″
	13	16			10	53	
2	27	3	Macula in horario.	4	0	33	Macula in horario.
	39	51	St. δ in h. borealior		11	3	St. δ in h. borealior
	———		maculâ vacat.		———		maculâ 1° 8′ 40″.
	12	48			10	30	

Macula occidentalior limbo ortivo ☾æ 22″ penduli, & borealior limbo auſtrino 16′ 58″. Diam. ☾æ proxime meridianum 28′ 43″. Mora ejus in hor. 2′ 16″.

April. 28 mane ☾a cum ſtella π in capite ♐.

$3^h\ 11'\ 35''$	Stella π in horario.		
33 46	Limbus ortivus ☾a in hor. & limbus boreus ☾a		
———	auſtralior ſtellâ	— —	$11'\ 5''$
22 11			
3 37 2	St. π in horario.		
59 55	Limbus ortivus ☾a in hor. & limbus boreus ☾a		
———	auſtralior ſtellâ.	— —	8 22
22 53			
4 4 14	St. π in horario.		
27 48	Limbus ortivus ☾a in hor. & limbus boreus ☾a		
———	auſtralior ſtellâ	— —	5 32
23 34			
4 32 55	St. π in horario.		
57 12	Limbus ortivus ☾a in hor. & limbus boreus ☾a		
———	auſtralior ſtellâ	— —	2 4
24 17			

☾a quaſi culminante, & alta 29°, circiter capta ejus Diam. $31'\ 33''$. Mora ejus in horario $2'\ 18''$.

Temporum momentis ſingulis aufer $20''$ penduli, & erunt correcta & vera.

Maji. 8 Obſervationem ☾a cum ♂ vide in Congreſſ. Planet.

Maji. 9 veſpere ☾a cum ſtella μ in ♊.

$7^h\ 49'\ 57''$	St. μ in horario.		
59 4	Limbus occid. ☾a in hor. & limb. auſtrinus ☾a		
———	auſtralior ſtellâ	— —	$15'\ 28''$.
9 7			

8ʰ 3′ 14″ St. μ in horario.
12 53 Limbus occid. ☾æ in hor. & limb. auſtrinus ☾æ
——— auſtralior ſtellâ — — 17′ 22″
9 39
8 16 35 St. μ in horario.
26 45 Limbus occid. ☾æ in hor. & limb. auſtrinus ☾æ
——— auſtralior ſtellâ — — 19 24
10 10
8 43 22 St. μ in horario.
54 37 Limbus occid. ☾æ in hor. & limb. auſtrinus ☾æ
——— auſtralior ſtellâ — — 23 24.
11 15
Diameter ☾æ 31′ 54″. Mora in hor. 2′ 23″; alt. ☾æ 21°.

Maji. 20 veſpere comparata ☾æ cum una parva ſtella.
9ʰ 46′ 45″ Stella in horario.
53 39 Limbus occid. ☾æ in hor. & limbus boreus ☾æ
——— auſtralior ſtellâ — — 16′ 51″
6 54
10 0 34 Stella in horario.
7 51 Limbus occid. ☾æ in hor. & limb. boreus ☾æ
——— auſtralior ſtellâ — — 18 31
7 17
10 14 58 Stella in horario.
22 36 Limbus occid. ☾æ in hor. & limb. boreus ☾æ
——— auſtralior ſtellâ — — 20 24.
7 38

10ʰ 26′ 4″	Stella in horario.			
33 57	Limbus occid. ☾ᵉ in hor. & limb. boreus ☾ᵉ			
———	auſtralior ſtellâ	—	—	21′ 44″
7 53				
10 38 12	Stella in horario.			
46 21	Limbus occid. ☾ᵉ in hor. & limb. boreus ☾ᵉ			
———	auſtralior ſtellâ	—	—	23 9
8 9				
10 50 5	Stella in horario.			
58 31	Limbus occid. ☾ᵉ in hor. & limb. boreus ☾ᵉ			
———	auſtralior ſtellâ	—	—	24 38
8 26				
11 2 43	Stella in horario.			
11 21	Limbus occid. ☾ᵉ in hor. & limb. boreus ☾ᵉ			
———	auſtralior ſtellâ	—	—	25 55.
8 38				

Diameter ☾ᵉ 30′ 29″. Mora ejus in horario 2′ 14½″ penduli; ☾ᵉ tum alta 28°.

Porro cum ſtellulam hanc nuſquam invenirem, neque in Catalogo Britannico Flamſtedii, neque in ejuſdem Zodiaco ſtellato, eamque ideo comparare vellem cum δ ♏, nubes impedivere.

Maji. 21 veſpere comparata ☾ᵉ cum duabus ſtellis in ♏, ac primum cum ea, quam Flamſtedius in ſuis Catalogo Britannico & Zodiaco ſtellato ponit in ♐ 3° 7′ 35″ cum latit. auſtr. 2° 37′ 10″, nempe ad annum illum 1690.

9h	41′	24″	Macula in horario.
	43	6	St. in h. borealior
———			maculâ 22′ 4″
	1	42	
9	47	53	Macula in horario.
	49	23	St. in h. borealior
———			maculâ 22′ 51″
	1	30	

9h	52′	49″	Macula in horario.
	54	12	St. in h. borealior
———			maculâ 23′ 26″
	1	23	
9	59	7	Macula in horario.
10	0	20	St. in h. borealior
———			maculâ 24′ 2″.
	1	13	

Deinde cum alia, quam idem ibidem ponit in ♐ 5° 25′ 12″ cum latit auſtr. 3° 11′ 30″.

10h	4′	36″	Macula in horario.
	15	1	St. in h. auſtralior
———			maculâ 35′ 28″
	10	25	
10	17	46	Macula in horario.
	27	49	St. in h. auſtralior
———			maculâ 34′ 17″
	10	3	
10	32	34	Macula in horario.
	42	16	St. in h. auſtralior
———			maculâ 32′ 50″
	9	42	
10	45	54	Macula in horario.
	55	15	St. in h. auſtralior
———			maculâ 31′ 38″
	9	21	

10h	57′	45″	Macula in horario.
11	6	50	St. in h. auſtralior
———			maculâ 30′ 34″
	9	5	
11	10	11	Macula in horario.
	18	55	St. in h. auſtralior
———			maculâ 29′ 32″
	8	44	
11	32	26	Macula in horario.
	40	38	St. in h. auſtralior
———			maculâ 26′ 35″
	8	12	
11	42	54	Macula in horario.
	50	51	St. in h. auſtralior
———			maculâ 27′ 8″.
	7	57	

Macula, utrobique eadem, occidentalior limbo ortivo ☾æ 22″ penduli, & borealior auſtrino 18′ 41″ circuli. Diameter ☾æ 30′ 45″. Mora in hor. 2′ 18″ pend. in altit. 26½°; ſine dubio occultata fuerit hæc ſtella, ſed nubes cœlum abſtulere.

Maji. 25 mane comparata ☾æ cum ſtella ο ♐ in capite Sagitàrii.

1h	7′	59″	St. ο in horario.
	17	34	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	9	35	ſtellâ 12′ 30″
1	22	29	St. ο in horario.
	32	28	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	9	59	ſtellâ 10′ 27″
1	39	49	St. ο in horario.
	50	17	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	10	28	ſtellâ 9′ 46″
1	52	58	St. ο in horario.
2	3	46	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	10	48	ſtellâ 8′ 36″
2	5	59	St. ο in horario.
	17	7	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	11	8	ſtellâ 7′ 30″
2	20	39	St. ο in horario.
	32	11	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	11	32	ſtellâ 5′ 54″
2	34	51	St. ο in horario.
	46	44	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	11	53	ſtellâ 4′ 31″
2h	50′	43″	St. ο in horario.
3	3	1	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	12	18	ſtellâ 2′ 46″
3	6	33	St. ο in horario.
	19	17	L. ort. ☾æ in hor. &
	———		limb. bor. auſtralior
	12	44	ſtellâ 0′ 59″.
3	25	0	Capta Diam. ☾æ 31′ 37″. Mora ejus in hor. 2′ 18″ pend. ☾æ alta 28°.
3	35	2	St. ο in horario.
	48	30	L. ort. in h. & limb.
	———		bor. borealior ſtellâ
	13	28	2′ 33″
3	53	21	St. ο in horario.
4	17	17	Limb. ort. in hor. &
	———		limb. bor. borealior
	13	56	ſtellâ 5′ 0″
4	11	8	St. ο in horario.
	25	33	Limb. ort. in hor. &
	———		limb. bor. borealior
	14	25	ſtellâ 7′ 30″

Die jam claro capta iterum Diam. ☾æ 31′ 33″; alt. ☾æ 22½°.

Jun. 18 veſpere ☾ cum ſtella θ ad plantam pedis Ophiuchi.

8^h	30′	27″	Macula in horario.
	58	1	St. θ in hor. auſtral.
	——	——	maculâ 4′ 55″
	27	34	
9	2	1	Macula in horario.
	28	42	St. θ in hor. auſtral.
	——	——	maculâ 2′ 43″
	26	41	
9	32	20	Macula in horario.
	58	14	St. θ in hor. auſtral.
	——	——	maculâ 1′ 7″
	25	54	
10	4	30	Maçula in horario.
	29	33	St. θ in hor. boreal.
	——	——	maculâ 0′ 20″
	25	3	
10	32	34	Macula in horario.
	56	56	St. θ in hor. boreal.
	——	——	maculâ 1′ 40″
	24	22	
10	0	41	Macula in horario.
	24	20	St. θ in hor. boreal.
	——	——	maculâ 2′ 23″
	23	39	
11	39	5	M. & poſt med. n.
0	1	44	St. θ in hor. boreal.
	——	——	maculâ 2′ 54″
	22	39	

0^h	5′	53″	M. & poſt med. noct.
	27	52	St. θ in hor. borealior
	——	——	maculâ 3′ 6″
	21	59	
0	31	54	M. & poſt med. noct.
	53	2	St. θ in hor. borealior
	——	——	maculâ 2′ 53″
	21	8½	
1	1	31½	M. & poſt med. noct.
1	22	1	St. θ in hor. borealior
	——	——	maculâ 2′ 30″
	20	29½	
1	23	36	M. & poſt med. noct.
	43	30	St. θ in hor. borealior
	——	——	maculâ 1′ 59″
	19	54	
1	47	56	M. & poſt med. noct.
2	7	7	St. θ in hor. borealior
	——	——	maculâ 1′ 18″
	19	11	
2	10	22	M. & poſt med. noct.
	28	55	St. θ in hor. borealior
	——	——	maculâ 0′ 10″.
	18	33	

Dignus notatu luſus Paralaxeos ☾ in Declinatione.

Macula orientalior limbo occiduo ☾ 1′ 58″ penduli, & auſtralior limbo boreo 11′ 41″. Diam. ☾ 31′ 3″; ejus Mora in hor. 2′ 20″ pend. ☾ tum alta 25°.

Jul. 28 mane comparata ☾[a] cum ſtellula quadam valde exigua, quæ eſt in linea recta a Plejadibus ad ſtellam *A* Tauri, & prope æqualiter diſtans ab hac & ab illis, notaturque in Zodiaco Flamſtedii in ♉ $27^\circ\ 36'$ cum latit. bor. $2^\circ\ 36'$.

3^h	$0'$	$59''$	Macula in horario.	3^h	$30'$	$39''$	Macula in horario.
	3	2	St. in hor. auſtralior		31	42	St. in hor. auſtralior
			maculâ $14'\ 4''$				maculâ $18'\ 47''$
	2	3			1	3	
3	9	14	Macula in horario.	3	35	6	Macula in horario.
	10	56	St. in hor. auſtralior		36	1	St. in hor. auſtralior
			maculâ $15'\ 27''$				maculâ $19'\ 13''$
	1	42			0	55	
3	18	4	Macula in horario.	3	39	11	Macula in horario.
	19	38	St. in hor. auſtralior		40	0	St. in hor. auſtralior
			maculâ $16'\ 43''$				maculâ $19'\ 42''$
	1	34			0	49	
3	22	35	Macula in horario.	3	42	48	Macula in horario.
	23	59	St. in hor. auſtralior		43	27	St. in hor. auſtralior
			maculâ $17'\ 26''$				maculâ $20'\ 22''$.
	1	19			0	39	

Macula occidentalior limbo ortivo ☾[a] $42\frac{1}{2}''$ penduli, & auſtralior limbo boreo $12'\ 44''$.

Diam. ☾[a] $32'\ 23''$ in altit. 40°.

Aug. 11 veſpere ☾[a] comparata cum ſtellula anonyma in ♏, quæ a ſtella σ ♏ diſtat recta in boream, quaſi $1^\circ\ 23'$ in eadem aſcenſione recta cum eadem.

7^h

7^h	28′	34″	Macula in horario.
	39	46	St. σ in hor. boreal.
			maculâ 6′ 41″
	11	12	
7	44	29	Macula in horario.
	55	18	St. σ in hor. boreal.
			maculâ 7′ 30″
	10	49	
7	58	21	Macula in horario.
8	8	55	St. σ in hor. boreal.
			maculâ 8′ 5″
	10	34	

8^h	12′	45″	Macula in horario.
	22	52	St. σ in hor. boreal.
			maculâ 8′ 40″
	10	7	
8	28	23	Macula in horario.
	38	6	St. σ in hor. boreal.
			maculâ 9′ 3″
	9	43	
8	41	8	Macula in horario.
	50	32	St. σ in hor. boreal.
			maculâ 9′ 31″.
	9	24	

Hic capta Diam. ☾^{ae} 30′ 24″. Mora in hor. 2′ 16″ pend. ☾^{a} alta 20°. Macula orientalior limbo occiduo 1′ 18″ pend. & auſtralior limbo bor. 12′ 52″. Et iterum

9^h	18′	30″	Macula in horario.
	26	57	St. σ in hor. boreal.
			maculâ 10′ 17″
	8	27	
9	30	43	Macula in horario.
	38	48	St. σ in hor. boreal.
			maculâ 10′ 31″
	8	5	

9^h	42′	38″	Macula in horario.
	50	23	St. σ in hor. boreal.
			maculâ 10′ 27″.
	7	45	

Aug. 12 veſpere ☾^{a} cum ſtella θ in planta pedis Ophiuchi.

7^h	6′	11″	Macula in horario.
	24	5	St. θ in h. eodem parallelo cum maculâ
	17	54	

7^h	45′	32″	Macula in horario.
8	2	27	St. θ in hor. boreal.
			maculâ 0′ 36″.
	16	55	

8^h 6′ 33″ Macula in horario.
22 57 St. θ in hor. boreal.
——— maculâ o′ 35″
16 24
8 25 59 Macula in horario.
41 53 St. θ in hor. boreal.
——— maculâ o′ 39″
15 54
8 44 54 Macula in horario.
9 o 19 St. θ in hor. boreal.
——— maculâ o′ 35″
15 25

9^h 4′ o″ Macula in horario.
18 57 St. θ in hor. boreal.
——— maculâ o′ 8″
14 57
9 25 5 Macula in horario.
39 28 St. θ in h. jam auſtr.
——— maculâ o′ 4″
14 23
9 44 2 Macula in horario.
57 54 St. θ in h. jam auſtr.
——— maculâ o′ 54″.
13 52

Hic capta Diam. ☾æ 30′ 38″, ejusque Mora in hor. 2′ 20″ penduli. Macula orientalior limbo occid. ☾æ 1′ 27″, & auſtralior limbo boreo 15′ 24″. Denique.

10^h 19′ 11″ Macula in horario.
32 5 St. θ in hor. auſtral.
——— maculâ 2′ 4″
12 54

10^h 35′ 55″ Macula in horario.
48 19 St. θ in hor. auſtral.
——— maculâ 2′ 47″.
12 24

Aug. 13 veſpere comparata ☾ª cum ſtella anonyma, quæ eſt cum aliis ante arcum Sagittarii, poniturque in Zodiaco ſtellato Flamſtedii in ♐ 25° 38′, cum latit. auſtr. o° 20′; nempe ad 1690, ac primum capta Diam. ☾æ 31′ 19″; mora in hor. 2′ 22″ penduli, cum ☾ª proxima eſſet meridiano.

7^h 28′ 47″ Stella in horario.
30 14 Mac. in h. auſtralior
——— ſtellâ 46′ 25″
1 27

7^h 34′ 51″ Stella in horario.
36 23 Mac. in h. auſtralior
——— ſtellâ 46′ 31″.
1 32

7^h	43′	46″	Stella in horario.
	45	35	Mac. in h. auſtralior
	——	——	ſtellâ 46′ 8″.
	1	49	
7	51	10	Stella in horario.
	53	10	Mac. in h. auſtralior
	——	——	ſtellâ 46′ 9″
	2	0	
7	56	32	Stella in horario.
	58	43	Mac. in h. auſtralior
	——	——	ſtellâ 45′ 45″
	2	11	
8	6	35	Stella in horario.
	9	2	Mac. in h. auſtralior
	——	——	ſtellâ 45′ 25″
	2	27	
8	14	24	Stella in horario.
	17	1	Mac. in h. auſtralior
	——	——	ſtellâ 45′ 15″
	2	37	

8^h	21′	3″	Stella in horario.
	23	53	Mac. in h. auſtralior
	——	——	ſtellâ 44′ 46″
	2	51	
8	27	15	Stella in horario.
	30	13	Mac. in h. auſtralior
	——	——	ſtellâ 44′ 36″
	2	58	
8	35	5	Stella in horario.
	38	15	Mac. in h. auſtralior
	——	——	ſtellâ 44′ 25″
	3	10	
8	57	39	Stella in horario.
9	1	26	Mac. in h. auſtralior
	——	——	ſtellâ 43′ 11″
	3	47	
9	7	10	Stella in horario.
	11	3	Mac. in h. auſtralior
	——	——	ſtellâ 42′ 38″.
	3	53	

Macula orientalior limbo occiduo 1′ 27″ penduli, & auſtralior limbo boreo 13′ 35″.

Aug. 27 mane ☾ ad ſtellam μ ♊ in calce dextri pedis Caſtoris.

2^h	30′	19″	Stella μ in horario.
	45	59	Limb. ☾ ortivus in h. & limbus auſtrinus auſtralior ſtellâ — — 27′ 44″.
	——	——	
	15	40	

2^h	$52'$	$49''$	St. μ in horario.
3	8	7	Cornu auſtr. ☾^{a} in h.
	8	13	Cornu bor. ☾^{a} in h.
	9	20	L. ☾^{a} ort. in h. & auſt.
	———		ſtellà $27'$ $51''$
	16	31	
3	13	52	St. μ in horario.
	29	56	Cornu auſtr. ☾^{a} in h.
	30	2	Cornu bor. ☾^{a} in h.
	31	9	L. ☾^{a} ort. in h. & auſt.
	———		ſtellà $27'$ $47''$
	17	17	
3	34	34	St. μ in horario.
	51	20	Cornu auſtr. ☾^{a} in h.
		26	Cornu bor. ☾^{a} in h.
	52	33	L. ☾^{a} ort. in h. & auſt.
	———		ſtellà $27'$ $49''$
	17	59	

4^h	$10'$	$54''$	St. μ in horario.
	28	53	Cornu auſtr. ☾^{a} in h.
		59	Cornu bor. ☾^{a} in h.
	30	6	L. ☾^{a} ort. in h. & auſt.
	———		ſtellà $28'$ $14''$
	19	12	
4	35	48	St. μ in horario.
	54	34	Cornu auſtr. ☾^{a} in h.
		41	Cornu bor. ☾^{a} in h.
	55	47	L. ☾^{a} ort. in h. & auſt.
	———		ſtellà $28'$ $45''$
	19	59	
4	58	6	St. μ in horario.
5	18	45	L. ☾^{a} ort. in h. & auſt.
	———		ſtellà $29'$ $12''$.
	20	39	

Diam. ☾^{a} $31'$ $54''$. Mora in h. $2'$ $23''$ pend. alt. ☾^{a} $38\frac{1}{2}°$.

Sept. 10 veſpere comparata ☾^{a} cum ſtella ν occidentaliore duarum, quæ ſunt in naſo Sagittarii.

6^h	$50'$	$12''$	Macula in horario.
7	10	57	Stella in horario borealior maculà $33'$ $11''$.
	———		
	20	45	

Hic capta Diameter ☾^{a} prope merid. $31'$ $21''$. Mora ejus in horario $2'$ $21''$ penduli. Macula orientalior limbo occiduo ☾^{a} $1'$ $32''$ pend., & borealior limbo auſtrino $20'$ $11''$.

7h	23′	56″	Maculâ in horario.	
	43	10	St. ν in hor. boreal.	
	———		maculâ	30′ 59″
	19	14		
9	2	37	Macula in horario.	
	19	19	St. ν in hor. boreal.	
	———		maculâ	22′ 13″
	16	42		
9	22	26	Macula in horario.	
	38	34	St. ν in hor. boreal.	
	———		maculâ	20′ 1″
	16	8		

9h	44′	3″	Macula in horario.	
	59	36	St. ν in h. boreal.	
	———		maculâ	17′ 40″
	15	33		
10	4	25	Macula in horario.	
	19	24	St. ν in h. boreal.	
	———		maculâ	15′ 11″
	14	59		
10	21	23	Macula in horario.	
	35	51	St. ν in h. boreal.	
	———		maculâ	13′ 0″.
	14	28		

Porro 2 ſtellæ ν differunt in aſc. recta 0′ 56″ penduli, & in declinatione 4′ 18″ circuli.

Sept. 11 veſpere comparata ☾ᵃ cum ſtella *f*, quæ eſt in ſtrophio volante poſt caput Sagitarii paulo ante culminationem ☾ᵃ capta Diameter 31′ 42″. Mora ejus in horario 2′ 21″ penduli. Macula orientalior limbo occiduo ☾ᵃ 1′ 20″, & borealior auſtrino 28′ 47″.

7h	40′	15″	Macula in horario.	
	55	28	St. *f* in h. borealior	
	———		maculâ	50′ 43″
	15	13		
7	58	56	Macula in horario.	
8	13	42	St. *f* in h. borealior	
	———		maculâ	48′ 29″
	14	46		

8h	15′	46″	Macula in horario.	
	30	6	St. *f* in h. borealior	
	———		maculâ	46′ 35″
	14	20		
8	34	55	Macula in horario.	
	48	46	St. *f* in h. borealior	
	———		maculâ	44′ 4″.
	13	51		

8^h 51′ 57″	Macula in horario.	10^h 34′ 2″	Macula in horario.
9 5 22	St. *f* in h. boreal.	44 44	St. *f* in h. boreal.
———	maculâ 41′ 54″	———	maculâ 26′ 10″
13 25		10 42	
9 13 57	Macula in horario.	10 50 19	Macula in horario.
26 49	St. *f* in h. boreal.	11 0 31	St. *f* in h. boreal.
———	maculâ 38′ 37″	———	maculâ 23′ 29″
12 52		10 12	
9 30 49	Macula in horario.	11 3 38	Macula in horario.
43 13	St. *f* in h. boreal.	13 33	St. *f* in h. boreal.
———	maculâ 34′ 56″	———	maculâ 21′ 16″
12 24		9 55	
10 6 51	Macula in horario.	11 15 16	Macula in horario.
18 22	St. *f* in h. boreal.	24 47	St. *f* in h. boreal.
———	maculâ 30′ 40″	———	maculâ 19′ 11″
11 31		9 31	
10 20 22	Macula in horario.	11 29 5	Macula in horario.
31 29	St. *f* in h. boreal.	38 13	St. *f* in h. boreal.
———	maculâ 28′ 32″	———	maculâ 16′ 43″.
11 7	Dub.	9 8	

Sept. 12 veſpere comparata ☾^{a} cum ſtella *e* maxime boreali trium in fronte Capricorni, ac primum quidem capta Dia-

6^h 5′ 0″ meter ☾^{a} 32′ 11″. Mora ejus in horario 2′ 21″ penduli; in altit. 21°. Macula orientalior limbo occid. 1′ 24″ penduli, & borealior auſtr. 6′ 7″.

6^h 35′ 47″	Macula in horario.	6^h 41′ 46″	Macula in horario.
39 14	St. *e* in h. auſtralior	45 1	St. *e* in h. auſtralior
———	maculâ 20′ 30″	———	maculâ 21′ 35″.
3 27		3 15	

6h	47′	37″	Macula in horario.
	50	44	St. ρ in h. auſtralior
			maculâ 22′ 8″
	3	7	
6	55	21	Macula in horario.
	58	15	St. ρ in h. auſtralior
			maculâ 23′ 19″
	2	54	
7	9	50	Macula in horario.
	12	21	St. ρ in h. auſtralior
			maculâ 25′ 14″
	2	31	
7	15	44	Macula in horario.
	18	5	St. ρ in h. auſtralior
			maculâ 27′ 2″
	2	21	
7	22	0	Macula in horario.
	24	12	St. ρ in h. auſtralior
			maculâ 27′ 12″
	2	12	
7	28	35	Macula in horario.
	30	37	St. ρ in h. auſtralior
			maculâ 27′ 57″
	2	2	
7	32	50	Macula in horario.
	34	44	St. ρ in h. auſtralior
			maculâ 28′ 30″
	1	54	

7h	38′	30″	Macula in horario.
	40	20	St. ρ in h. auſtralior
			maculâ 29′ 6″
	1	50	
7	49	41	Macula in horario.
	51	10	St. ρ in h. auſtralior
			maculâ 31′ 5″
	1	29	
7	55	57	Macula in horario.
	57	17	St. ρ in h. auſtralior
			maculâ 32′ 7″
	1	20	
8	3	51	Macula in horario.
	5	1	St. ρ in h. auſtralior
			maculâ 33′ 15″
	1	10	
8	8	7	Macula in horario.
	9	7	St. ρ in h. auſtralior
			maculâ 34′ 15″
	1	0	
8	16	44	Macula in horario.
	17	32	St. ρ in h. auſtralior
			maculâ 35′ 30″
	0	48	
8	23	33	Macula in horario.
	24	11	St. ρ in h. auſtralior
			maculâ 36′ 25″.
	0	38	

Hic capta Diam. ☾ᵉ prope meridianum 32′ 32″.

Sept. 19 veſpere comparata ☾ᵃ cum ſtellis ζ & τ in cauda ♈, quarum alteram etiam texit.

10ʰ	16′	17″	Macula in horario.
	19	52	St. ζ in h. boreal.
	—	—	maculâ 31′ 9″
	3	35	
10	22	44	Macula in horario.
	26	3	St. ζ in h. boreal.
	—	—	maculâ 29′ 48″
	3	19	
10	32	31	Macula in horario.
	35	29	St. ζ in h. boreal.
	—	—	maculâ 27′ 56″
	2	58	
10	37	53	Macula in horario.
	40	39	St. ζ in h. boreal.
	—	—	maculâ 26′ 54″
	2	46	& immoto teleſcop.
	46	53	St. τ in h. boreal.
			maculâ 34′ 36″
	48	32	Alia ſtel. in h. bor.
			maculâ 10′ 25″
	50	10	Alia ſtel. in h. bor.
			maculâ 14′ 40″
10	52	26	Macula in horario.
	54	40	St. ζ in h. boreal.
	—	—	maculâ 24′ 6″
	2	14	

10ʰ	0′	48″	Macula in horario.
	2	45	St. ζ in h. boreal.
	—	—	maculâ 22′ 21″
	1	57	
11	13	0	Macula in horario.
	14	30	St. ζ in h. boreal.
	—	—	maculâ 19′ 59″
	1	30	
11	19	1	Macula in horario.
	20	19	St. ζ in h. boreal.
	—	—	maculâ 18′ 45″
	1	18	
11	23	31	Macula in horario.
	24	40	St. ζ in h. boreal.
	—	—	maculâ 17′ 49″
	1	9	
11	28	44	Macula in horario.
	29	42	St. ζ in h. boreal.
	—	—	maculâ 16′ 57″
	0	58	
11	32	25	Macula in horario.
	33	15	St. ζ in h. boreal.
	—	—	maculâ 16′ 10″.
	0	50	

11^h 36′ 26″ Macula in horario.	11^h 39′ 28″ Macula in horario.
37 8 St. ζ in h. boreal.	40 5 St. ζ in h. boreal
——— maculâ 15′ 26″	——— maculâ 14′ 50″.
0 42	0 37

Macula occidentalior limbo ortivo ☾æ 0′ 32½″ penduli, & auſtralior boreo 6′ 9″. Tum vero poſt mediam noctem.

Sept. 20 mane ☾æ cum eiſdem ſtellis ζ & τ ♈, & primum capta Dia-
0^h 15′ 0″ meter ☾æ 33′ 47″ in altit. 47°. Mora in hor. 2′ 28½″.

0 52	31	Stella ζ in horario.	
54	19	Macula eadem, quæ heri in hor. auſtralior ✱	1′ 15″
1	48		
0 59	32	Stella ζ in horario.	
1 1	34	Macula in hor. in eodem præciſe parallelo, quo ſtella.	
2	2		
1 20	54	Stella ζ in horario.	
23	36	Macula in hor. borealior ſtella ζ	3′ 53″
27	9	τ in horario borealior ſtella ζ	7 56
1 40	17	Stella ζ in horario.	
43	33	Macula in hor. borealior ſtellâ ζ	6 39
46	32	τ in hor. borealior ſtella ζ	7 46
1 49	55	St. ζ in horario.	
53	30	Macula in hor. borealior ſtella ζ	8 36
56	10	τ in hor. borealior ſtella ζ	7 44

2ʰ	19′	10″	Stella ζ in horario.	
	23	36	Macula in hor. borealior ſtella ζ	13′ 4″
	25	25	τ in hor. borealior ſtella ζ	7 43
2	37	4	Stella ζ in horario.	
	42	2	Macula in hor. borealior ſtella ζ	15 34
	43	19	τ in hor. borealior ſtella ζ	7 49
2	52	7	Stella ζ in horario.	
	57	31	Macula in hor. borealior ſtella ζ	17 41
	58	22	τ in hor. borealior ſtella ζ	vacat.
3	10	10	Stella diſparuit abſorpta a limbo lucido ☾æ.	
4	24	15	Eadem rurſus apparuit.	

Sept. 20 veſpere comparata ☾æ cum ſtella υ majore duarum ſupra oculum ſiniſtrum Tauri.

10ʰ	55′	42″	Macula in horario.	
	57	21	Limbus ortivus in hor. & limbus boreus ☾æ borealior maculâ 12′ 54″ & immoto tubo.	
	1	39		
11	8	21	Stella υ in hor. borealior maculâ	7′ 15″
	12	39	A macula ad ſtellam.	
11	10	53	Macula in horario.	
	12	31	L. ort. in h. & limb. bor. borealior maculâ	12 50
	1	38	A macula ad limbum ortivum ☾æ.	
	22	56	Stella υ in hor. borealior maculâ	4 50.
	12	3	A macula ad ſtellam.	

11ʰ 24′ 43″ Macula in horario.
26 21 L. ort. in hor. & limb. bor. borealior maculâ 12′ 50″

1 38
36 16 Stella υ in hor. borealior maculâ 2 50

11 33
11 39 12 Macula in horario.
40 50 L. ort. in h. & limb. bor. borealior maculâ 12 54

1 38
50 11 Stella υ in hor. borealior maculâ 0 38

10 59
11 53 7 Macula in horario.
54 46 L. ort. ☾ in hor. & deinde poſt med. noct. Sept. 21.
0 3 39 St. υ in h. jam auſtralior maculâ 1′ 15″

10 32
0 5 22 Macula in hor.
7 1 L. ort. ☾ in hor.
15 27 St. υ in h. auſtralior maculâ 3′ 5″

10 5
0 18 27 Macula in hor.
20 5 L. ort. ☾ in hor.
28 4 St. υ in h. auſtralior maculâ 4′ 56″

9 37

0 31 8 Macula in hor.
32 46 L. ort. ☾ in hor.
40 18 St. υ in h. auſtralior maculâ 6′ 41″

9 10
0 42 41 Macula in hor.
44 20 L. ort. ☾ in hor.
51 26 St. υ in h. auſtralior maculâ 7′ 50″.

8 45

0 53 45 Macula in horario.
1 2 6 St. υ in h. auſtralior
——— maculâ 9′ 21″.

8 21

Hic capta Diam. ☾^{e} 33′ 17″. Mora in h. 2′ 29″ pend. altit. ☾^{a} 52°.

2 0 12 Macula in horario.
6 27 St. υ in h. auſtralior
——— maculâ 17′ 5″

6 15

2^{h} 12′ 31″ Macula in horario.
18 23 St. υ in h. auſtralior
——— maculâ 18′ 42″

5 52

2 24 22 Macula in horario.
29 54 St. υ in h. auſtralior
——— maculâ 19′ 44″

5 32

2 30 53 Stellula proxima ſtellæ υ in h. auſtralior eadem maculâ 8′ 16″.

Stella χ majuſcula occidentalior ſtella υ 0′ 48″ penduli, diſtabantque invicem 34′ 7″ circuli.

2 58 55 Macula in horario.
3 3 26 St. υ in h. auſtralior
——— maculâ 23′ 5″

4 31

3 34 10 Macula in horario.
37 37 St. υ in h. auſtralior
——— maculâ 26′ 27″

3 27

3 51 46 Macula in horario.
54 44 St. υ in h. auſtralior
——— maculâ 27′ 40″

2 58

4 5 39 Macula in horario.
8 14 St. υ in h. auſtralior
——— maculâ 28′ 24″

2 35

4^{h} 19′ 54″ Macula in horario.
22 7 St. υ in h. auſtralior
——— maculâ 29′ 25″

2 13

4 37 4 Macula in horario.
38 46 St. υ in h. auſtralior
——— maculâ 30′ 32″

1 42

5 4 43 Macula in horario.
5 38 St. υ in h. auſtralior
——— maculâ 31′ 48″.

0 55

Sed harum Operationum poſteriorum aliquæ ſunt dubiæ nonnihil.

Sept. 23 mane poſt mediam noctem ☾ ad ſtellam μ ♊ in calce Caſtoris, quam etiam texit. Sed initio nubibus intervolantibus diſtantiæ ſolum aliquæ capi potuere, dum denique ſerenitas reddita.

1^{h}	0′	35″	Stella μ diſt. a limbo propiore ☾	32′ 30″
	3	35	— — —	30 53
1	5	42	Macula in horario.	
	8	53	St. μ in hor. auſtralior maculâ	9 6
	3	11		
1	12	54	St. μ diſt. a limb. propiore ☾	26 14
	15	34	— — —	24 48
	18	17	— — —	23 28

1	20	31	Macula in horario.	
	21	37	Limb. ort. ☾ in h.	
	23	9	St. μ in h. auſtralior maculâ	9′ 32″
	2	38		
1	25	31	Macula in horario.	
	26	38	Limb. ort. ☾ in h.	
	28	0	St. μ in h. auſtralior maculâ	9′ 48″
	2	29		
1	29	25	Macula in horario.	
	31	44	St. μ in h. auſtralior maculâ	9′ 48″
	2	19		
1^{h}	33′	48″	Macula in horario.	
	34	54	Limb. ort. ☾ in h.	
	35	59	St. μ in h. auſtralior maculâ	9′ 48″
	2	11		
1	37	13	Macula in horario.	
	38	18	Limb. ort. ☾ in h.	
	39	13	St. μ in h. auſtralior maculâ	10′ 15″d.
	2	0		
1	43	21	Macula in horario.	
	44	28	Limb. ort. ☾ in h.	
	45	14	St. μ in h. auſtralior maculâ	10′ 3″d.
	1	53		

Igitur macula occidentalior limbo ortivo ☾ 1′ 6″ penduli, eſt autem eadem borealior limbo auſtrino ☾ 24′ 35″.

1^h 56′ 42″ Stella μ diſtat a limbo propiore ☾æ 4′ 49″

2 6 29 Stella μ immerſit poſt limbum lucidum ☾æ præciſe e regione Grimaldi, qui non diſtabat a limbo niſi o′ 24″. Hujus puncti Immerſionis capta deinde diſtantia, a cornu boreo ☾æ 23′ 57″, & a cornu auſtrino 22′ 7″. Capta illico Diam. ☾æ 32′ 18″. Mora in hor. 2′ 25″ penduli.

3 18 28 Emerſit ſtella μ de ſub limbo obſcuro ☾æ diſtans a cornu boreo ☾æ 24′ 1″ tantundem ferme, quantum immergens.

3	22	41	Stella μ in horario.	4^h	21′	42″	Stella μ in horario.
	25	10	L. ort. in h. & limb.		25	56	L. ort. in h. & limb.
———			auſtrin. ☾æ auſtralior	———			auſtrin. ☾æ auſtralior
	2	29	ſtellâ 14′ 27″		4	14	ſtellâ 15′ 36″
3	37	45	Stella μ in horario.	4	32	28	Stella μ in horario.
	40	42	L. ort. in h. & limb.		37	o	L. ort. in h. & limb.
———			auſtrin. ☾æ auſtralior	———			auſtrin. ☾æ auſtralior
	2	57	ſtellâ 14′ 47″		4	32	ſtellâ 16′ 5″
3	48	53	Stella μ in horario.	4	52	39	Stella μ in horario.
	52	11	L. ort. in h. & limb.		57	45	L. ort. in h. & limb.
———			auſtrin. ☾æ auſtralior	———			auſtrin. ☾æ auſtralior
	3	18	ſtellâ 14′ 54″		5	6	ſtellâ vacat.
3	54	31	Stella μ in horario.	5	3	55	Stella μ in horario.
	57	58½	L. ort. in h. & limb.		9	18	L. ort. in h. & limb.
———			auſtrin. ☾æ auſtralior	———			auſtrin. ☾æ auſtralior
	3	27½	ſtellâ 15′ o″		5	23	ſtellâ 17′ 9″
4	11	14	Stella μ in horario.	5	17	8	Stella μ in horario.
	15	10	L. ort. in h. & limb.		22	55	L. ort. in h. & limb.
———			auſtrin. ☾æ auſtralior	———			auſtrin. ☾æ auſtralior
	3	56	ſtellâ 15′ 14″		5	47	ſtellâ 17′ 38″.

5^h	27′	36″	Stella μ in horario.
	33	40	L. ort. in h. & limb.
	———		auſtrin. ☾æ auſtralior
	6	4	ſtellâ 18′ 1″
5	37	39	Stella μ in horario.
	43	59	L. ort. in h. & limb.
	———		auſtrin. ☾æ auſtralior
	6	20	ſtellâ 18′ 26″

5^h	45′	33″	Stella μ in horario.
	52	6	L. ort. in h. & limb.
	———		auſtrin. ☾æ auſtralior
	6	33	ſtellâ 19′ 4″
5	54	12	Stella μ in horario.
6	0	59	L. ort. in h. & limb.
	———		auſtrin. ☾æ auſtralior
	6	47	ſtellâ 19′ 21″.

Sept. 26 mane ☾æ ad α ♌ primum, tum ad α ♋.

3^h	38′	4″	Macula in horario.
4	42	33	α ♌ in hor. auſtralior maculâ.
	———		
1	4	29	

Capta Diam. ☾æ 30′ 54″. Mora in hor. 2′ 10″ pend. ☾æ tum alta 36°.

5^h	1′	45″	St. α ♋ in hor.
	9	48	Mac. in h. borealior
	———		ſtellâ 35′ 37″
	8	3	
5	13	38	St. α ♋ in hor.
	21	56	Mac. in h. borealior
	———		ſtellâ 34′ 8″
	8	18	

5^h	28′	5″	St. α ♋ in hor.
	36	45	Mac. in h. borealior
	———		ſtellâ 32′ 3″
	8	40	
5	38	9	St. α ♋ in hor.
	47	4	Mac. in h. borealior
	———		ſtellâ 30′ 17″.
	8	55	

Capta hic rurſus Diam. ☾æ 30′ 57″. Mora in hor. 2′ 10″ penduli, ☾æ tum alta 45°.

Sept. 27 mane ☾^{e} ad ſtellam π ♌, & primum capta Diam. ☾^{æ} 30′ 36″. Mora in hor. 2′ 18″; ☾^{e} alta 20°.

4^h	43′	11″	Macula in horario.
	50	14	St. π ♌ in h. auſtral.
	———		maculâ 13′ 54″
	7	3	
4	52	26	Macula in horario.
	59	13	St. π ♌ in h. auſtral.
	———		maculâ 12′ 30″
	6	47	
5	3	33	Macula in horario.
	10	3	St. π ♌ in h. auſtral.
	———		maculâ 10′ 25″
	6	30	
5	14	50	Macula in horario.
	21	2	St. π ♌ in h. auſtral.
	———		maculâ 8′ 43″
	6	12	

5^h	28′	7″	Macula in horario.
	33	58	St. π ♌ in h. auſtral.
	———		maculâ 6′ 32″
	5	51	
5	35	54	Macula in horario.
	41	33	St. π ♌ in h. auſtral.
	———		maculâ 5′ 13″
	5	39	
5	43	47	Macula in horario.
	49	16	St. π ♌ in h. auſtral.
	———		maculâ 3′ 43″.
	5	29	

Erat autem macula occidentalior limbo ortivo ☾^{æ} 0′ 26½″ penduli, & borealior limbo auſtrino 26′ 40″ circuli.

Oct. 6 veſpere comparata ☾^{a} cum ſtella θ in planta pedis ſiniſtri Ophiuchi.

6^h	6′	42″	Macula in horario.
	9	46	St. θ in h. auſtralior
	———		maculâ 23′ 47″
	3	4	
6	12	25	Macula in horario.
	15	24	St. θ in h. auſtralior
	———		maculâ 23′ 56″
	2	59	

6^h	16′	43″	Macula in horario.
	19	34	St. θ in h. auſtralior
	———		maculâ 24′ 6″
	2	51	
6	21	14	Macula in horario.
	23	57	St. θ in h. auſtralior
	———		maculâ 24′ 12″.
	2	43	

6^h

6^h 25′ 30″	Macula in horario.			6^h 40′ 20″	Macula in horario.			
28 9	St. θ in h. auſtralior			42 35	St. θ in h. auſtralior			
———	maculâ	24′ 19″		———	maculâ	24′ 48″.		
2 39				2 15				

Neque plus per nubes licuit. Porro macula erat orientalior limbo occiduo ☾ª 0′ 31″ penduli, & auſtralior limbo boreo 17′ 36″.

Oct. 7 veſp. comparata ☾ª cum quadam ſtellula, quæ in Zod. ſtell. Flamſt. notatur in ♐ 28° 23′ cum latit auſtr. 0° 13′ proxime ante arcum Sagittarii. Diam. ☾ª 30′ 43″. Mora in hor. 2′ 18″ penduli in altit. 18°.

7^h 50′ 34″	Stella in horario.		8^h 3′ 31″	Stella in horario.
54 16	L. ☾ª occ. in hor. &		7 35	L. ☾ª occ. in hor &
———	auſtrin. auſtralior *ª		———	auſtrin. auſtralior *ª
3 42	12′ 6″		4 4	10′ 48″
7 56 31	Stella in horario.		8 9 28	Stella in horario.
8 0 24	L. ☾ª occ. in hor. &		13 42	L. ☾ª occ. in hor. &
———	auſtrin. auſtralior *ª		———	auſtrin. auſtralior *ª
3 53	11′ 29″		4 14	20′ 40″.

Oct. 9 veſpere comparata ☾ª cum ſtella π ♑ nempe maxime orientali trium in fronte Capricorni.

8^h 0′ 5″	Macula in horario.		8^h 42′ 56″	Macula in horario.
22 16	St. π in h. auſtralior		9 4 3	St. π in h. auſtralior
———	maculâ 1′ 47″		———	maculâ 9′ 1″.
21 11			21 7	

Diameter ☾^{æ} 31′ 56″. Mora in horario 2′ 17½″ pend. in altit. 28°. Macula orientalior limbo occiduo ☾^{æ} 1′ 10″ pend. & borealior auſtrino 20′ 42″.

9^{h}	33′	8″	Macula in horario.	9^{h}	55′	59″	Macula in horario.
	52	55	St. π in h. auſtralior	10	15	11	St. π in h. auſtralior
———			maculâ 18′ 1″	———			maculâ 22′ 6″.
	19	47			19	12	

Oct. 11 veſpere comparata ☾^{æ} cum ſtella borealiore duarum *C* in extrema cauda ♑.

7^{h}	41′	16″	St. *C* in horario.	8^{h}	10′	25″	St. *C* in horario.
	47	19	L. ☾^{æ} occ. in h. &		17	12	L. ☾^{æ} occ. in h. &
———			limb. auſtrin. auſtral.	———			limb. auſtrin. auſtral.
	6	3	ſtellâ 20′ 9″		6	47	ſtellâ 13′ 16″
7	49	53	St. *C* in horario.	8	48	29	St. *C* in horario.
	56	9	L. ☾^{æ} occ. in h. &		56	11	L. ☾^{æ} occ. in h. &
———			limb. auſtrin. auſtral.	———			limb. auſtrin. auſtral.
	6	16	ſtellâ 18′ 3″		7	42	ſtellâ 5′ 8″.
8	1	9	St. *C* in horario.				Diam. ☾^{æ} 32′ 56″. Mora
	7	42	L. ☾^{æ} occ. in h. &				in hor. 2′ 17″ penduli; alt. ☾^{æ}
———			limb. auſtrin. auſtral.				40°.
	6	33	ſtellâ 15′ 30″				

Oct. 17 mane comparata ☾^{æ} cum ſtella anonyma.

4^{h}	9′	16″	Macula in horario.	4^{h}	34′	49″	Macula in horario.
	25	55	St. in hor. auſtralior		50	34	St. in hor auſtralior
———			maculâ 9′ 58″	———			maculâ vacat.
	16	39			15	45	

$4^h\ 57'\ 16''$	Macula in horario.	$5^h\ 15'\ 23''$	Macula in horario.
5 12 15	St. in hor. auſtralior	29 45	St. in hor. auſtralior
———	maculâ $14'\ 48''$	———	maculâ $15'\ 47''$.
14 59		14 22	

6 20 0 Capta Diam. ☾æ $33'\ 50''$. Mora in hor. $2'\ 29''$ penduli, macula occidentalior limbo ortivo $0'\ 37''$ penduli, & auſtralior boreo $6'\ 3''$ circuli.
Porro quænam hæc ſtella ſit, incertum. *98 Mayeri*

Oct. 17 veſpere ☾æ cum ſtella *A* Tauri.

$8^h\ 28'\ 44''$	Macula in horario.	$10^h\ 47'\ 24''$	Macula in horario.
49 32	St. *A* in h. borealior	11 2 33	St. *A* in h. boreal.
———	maculâ $29'\ 25''$	———	maculâ $6'\ 10''$
20 48		15 9	
8 53 8	Macula in horario.	11 5 49	Macula in horario.
9 12 55	St. *A* in h. borealior	20 41	St. *A* in h. boreal.
———	maculâ $25'\ 13''$	———	maculâ $3'\ 6''$.
19 47		14 52	

Hic capta Diameter ☾æ $33'\ 58''$. Mora in horario $2'\ 29\frac{1}{2}''$ penduli; ☾æ alta 56°. Macula occidentalior limbo ortivo ☾æ $0'\ 32''$ penduli, & auſtralior boreo $6'\ 59''$.

$11^h\ 44'\ 10''$	Macula in horario.	$0^h\ 2'\ 7''$	Macula in horario.
57 47	St. *A* in h. auſtral.	15 8	St. *A* in h. auſtralior
	maculâ $2'\ 29''$.	———	maculâ $5'\ 26''$.
	Tum poſt mediam noctem	13 1	
Oct. 18 mane			

0^h	$17'$	$3''$	Macula in horario.	
	29	39	St. *A* in h. auſtralior	
	——	——	maculâ	$7'$ $14''$
	12	36		
0	37	55	Macula in horario.	
	49	51	St. *A* in h. auſtralior	
	——	——	maculâ	$9'$ $52''$
	[illegible]	56		
0	56	46	Macula in horario.	
1	8	9	St. *A* in h. auſtralior	
	——	——	maculâ	$12'$ $13''$
	11	23		
1	17	51	Macula in horario.	
	28	32	St. *A* in h. auſtralior	
	——	——	maculâ	$14'$ $51''$
	10	41		
1	33	25	Macula in horario.	
	43	40	St. *A* in h. auſtralior	
	——	——	maculâ	$16'$ $18''$
	10	15		
2	18	38	Macula in horario.	
	27	32	St. *A* in h. auſtralior	
	——	——	maculâ	$21'$ $1''$
	8	54		
2	47	21	Macula in horario.	
	55	25	St. *A* in h. auſtralior	
	——	——	maculâ	$23'$ $16''$
	8	4		

3^h	$9'$	$15''$	Macula in horario.	
	16	38	St. *A* in h. auſtralior	
	——	——	maculâ	$25'$ $17''$
	7	23		
3	33	18	Macula in horario.	
	39	59	St. *A* in h. auſtralior	
	——	——	maculâ	$26'$ $43''$
	6	41		
3	48	59	Macula in horario.	
	55	10	St. *A* in h. auſtralior	
	——	——	maculâ	$27'$ $55''$
	6	11		
4	5	5	Macula in horario.	
	10	44	St. *A* in h. auſtralior	
	——	——	maculâ	vacat.
	5	39		
4	28	54	Macula in horario.	
	33	50	St. *A* in h. auſtralior	
	——	——	maculâ	$29'$ $50''$
	4	56		
4	46	39	Macula in horario.	
	50	59	St. *A* in h. auſtralior	
	——	——	maculâ	$30'$ $40''$.
	4	20		

Habet autem ſtella *A* ſociam orientaliorem $0'$ $37''$ penduli, & auſtraliorem $3'$ $51''$ circuli.

Oct. 18 veſpere comparata ☾^{a} cum ſtella τ infra eductionem cornu borei in fronte Tauri.

9^h	40′	47″	St. τ in horario.
	49	49	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	9	2	26′ 50″
9	51	55	St. τ in horario.
10	1	25	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	9	30	28′ 1″
10	3	5	St. τ in horario.
	13	2	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	9	57	29′ 23″
10	18	57	St. τ in horario.
	29	35	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	10	38	31′ 17″
10	33	26	St. τ in horario.
	44	36	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	11	10	32′ 40″

10^h	54′	20″	St. τ in horario.
11	6	19	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	11	59	35′ 2″
1	9	20	St. τ in horario.
	21	52	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	12	32	36′ 47″
11	24	42	St. τ in horario.
	37	49	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	13	7	38′ 5″
11	40	18	St. τ in horario.
	53	56	L. ☾^{a} ort. in h. & bor. boreal. ſtellà
	13	38	39′ 44″.

Hic capta Diam. ☾^{a} 33′ 21″. Mora ejus in horario 2′ 29″ penduli.

Oct. 19 veſpere ☾^{a} ad Propodem ♊ ſtellam *H.*

11^h	52′	39″	Macula in horario.
	58	31	St. *H* in hor. borealior maculà 20′ 38″; tum poſt mediam noctem Oct. 20 mane
	5	52	

0^h	$0'$	$49''$	Macula in horario.
	6	24	St. *H* in h. borealior
	——	——	maculâ $20'\ 32''$
	5	35	
0	8	27	Macula in horario.
	13	46	St. *H* in h. borealior
	——	——	maculâ $20'\ 7''$
	5	19	
0	15	24	Macula in horario.
	20	28	St. *H* in h. borealior
	——	——	maculâ $19'\ 58''$
	5	4	

0^h	$22'$	$12\frac{1}{2}''$	Macula in horario.
	27	2	St. *H* in h. borealior
	——	——	maculâ $19'\ 48''$
	4	49½	
0	29	56	Macula in horario.
	34	30	St. *H* in h. borealior
	——	——	maculâ $19'\ 30''$.
	4	34	

Hic capta Diam. ☾^{æ} $32'\ 57''$. Mora in horario $2'\ 28''$ penduli.

Macula orientalior limbo occiduo ☾^{æ} $0'\ 20''$, & auſtralior limbo boreo $9'\ 35''$ circuli.

9	49	47	Macula in horario.
	53	41	St. *H* in h. borealior
	——	——	maculâ $19'\ 7''$
	3	54	
0	57	51	Macula in horario.
1	1	29	St. *H* in h. borealior
	——	——	maculâ $18'\ 56''$
	3	38	
1	3	17	Macula in horario.
	6	40	St. *H* in h. borealior
	——	——	maculâ $18'\ 53''$
	3	23	
1	8	55	Macula in horario.
	12	12	St. *H* in h. borealior
	——	——	maculâ $18'\ 45''$
	3	17	

1^h	$40'$	$26''$	Macula in horario.
	42	23	St. *H* in h. borealior
	——	——	maculâ $18'\ 11''$
	1	57	
1	58	35	Macula in horario.
2	0	19	St. *H* in h. borealior
	——	——	maculâ $18'\ 9''$
	1	44	
2	6	41	Macula in horario.
	8	12	St. *H* in h. borealior
	——	——	maculâ $18'\ 9''$
	1	31	
2	14	32	Macula in horario.
	15	48	St. *H* in h. borealior
	——	——	maculâ $18'\ 26''$.
	1	16	

2^h 18′ 27″ Macula in horario.
19 36 St. *H* in h. borealior
——— maculâ 18′ 13″
1 9
2 22 27 Macula in horario.
23 28 St. *H* in h. borealior
——— maculâ 18′ 24″
1 1
2 26 12 Macula in horario.
27 6 St. *H* in h. borealior
——— maculâ 18′ 20″
0 54
2 30 3 Macula in horario.
51 St. *H* in h. borealior
——— maculâ 18′ 20″
48
2 44 48 St. *H* bor. 18 28
2 53 39 — 18 40
3 0 55 — 18 45.

Cepi nempe ſolum differentias declinationum, nam differentias aſcenſionum ob nimiam viciniam maculæ & ſtellæ capere non licuit, & vide ſis luſum paralaxeos declinationis.

3^h 21′ 51″ St. *H* in horario.
22 33 Mac. in hor. auſtral.
——— ſtellâ 19′ 11″
0 42

3^h 31′ 43″ St. *H* in horario.
32 41 Mac. in hor. auſtral.
——— ſtellâ 19′ 35″
0 58
3 39 41 St. *H* in horario.
40 56 Mac. in hor. auſtral.
——— ſtellâ 19′ 41″
1 15
3 49 19 St. *H* in horario.
50 49 Mac. in hor. auſtral.
——— ſtellâ. 20′ 13″ dub.
1 30
3 57 $1\frac{1}{2}$ St. *H* in horario.
58 46 Mac. in hor. auſtral.
——— ſtellâ 20′ 13″
1 $44\frac{1}{2}$
4 5 56 St. *H* in horario.
7 47 Mac. in hor. auſtral.
——— ſtellâ 20′ 32″
1 51
4 17 45 St. *H* in horario.
20 5 Mac. in hor. auſtral.
——— ſtellâ 21′ 11″
2 20
4 31 $35\frac{1}{2}$ St. *H* in horario.
34 $17\frac{1}{2}$ Mac. in hor. auſtral.
——— ſtellâ 21′ 58″.
2 42

4^h 48′ 35″ St. *H* in horario.
51 49 Mac. in hor. auſtral.
——— ſtellâ 22′ 50″
3 14
5 9 31 St. *H* in horario.
13 20 Mac. in hor. auſtral.
——— ſtellâ 24′ 23″
3 49

5^h 20′ 10″ St. *H* in horario.
24 18 Mac. in hor. auſtral.
——— ſtellâ 24′ 53″.
4 8

Oct. 20 veſpere ſub mediam noctem ☾^{a} ad ſtellam ζ ♊, quam etiam texit.

11^h 39′ 9″ Macula in horario.
46 19 St. ζ in h. auſtral.
——— maculâ 29′ 2″
7 10
11 52 9 Macula in horario.
58 51 St. ζ in h. auſtral.
——— maculâ 28′ 45″
6 42 & Oct. 21 mane
0 1 51 Macula in horario.
8 11 St. ζ in h. auſtral.
——— maculâ 28′ 26″
6 20
0 10 13 Macula in horario.
16 15 St. ζ in h. auſtral.
——— maculâ 28′ 12″
6 2

0^h 19′ 25″ Macula in horario.
25 7 St. ζ in h. auſtralior.
——— maculâ vacat.
5 42
Hic capta Diam. ☾^{a} 32′ 12″, ejus mora in hor. 2′ 23″, ☾^{a} alta 31°. Macula occidentalior limbo ort. 0′ 16″, & borealior auſtrino 21′ 41″.
0^h 54′ 10″ Macula in horario.
58 40 St. ζ in h. auſtralior
——— maculâ 27′ 8″
4 30
1 0 28 Macula in horario.
4 45 St. ζ in h. auſtralior
——— maculâ 26′ 54″.
4 17

1^h

1^{h} 7′ 22″	Macula in horario.
11 27	St. ζ in h. auſtralior
———	maculâ 26′ 44″
4 5	
1 22 58	Macula in horario.
26 31	St. ζ in h. auſtralior
———	maculâ 26′ 20″
3 33	
1 32 52	Macula in horario.
36 8	St. ζ in h. auſtralior
———	maculâ 25′ 52″
3 16	
1 38 24	Macula in horario.
41 29	St. ζ in h. auſtralior
———	maculâ vacat.
3 5	
1 44 28	Macula in horario.
47 22	St. ζ in h. auſtralior
———	maculâ 25′ 28″
2 54	
2 15 24	Macula in horario.
17 22	St. ζ in h. auſtralior
———	maculâ 24′ 10″
1 58	
2 22 21	Macula in horario.
24 5	St. ζ in h. auſtralior
———	maculâ 24′ 2″
1 44	

2^{h} 26′ 11″	Macula in horario.
27 49	St. ζ in h. auſtralior
———	maculâ 23′ 41″
1 38	
2 31 24	Macula in horario.
32 54	St. ζ in h. auſtralior
———	maculâ 23′ 24″
1 30	
2 38 39	Macula in horario.
39 55	St. ζ in h. auſtralior
———	maculâ 23′ 1″
1 16	
2 42 59	Macula in horario.
44 9	St. ζ in h. auſtralior
———	maculâ 22′ 48″
1 10	
2 46 52	Macula in horario.
47 54	St. ζ in h. auſtralior
———	maculâ 22′ 38″
1 2	
2 50 30	Macula in horario.
51 26	St. ζ in h. auſtralior
———	maculâ 22′ 26″
0 56	
2 55 22	Macula in horario.
56 11	St. ζ in h. auſtralior
———	maculâ 22′ 6″.
0 49	

3ʰ	0′	24″	Macula in horario.
	1	5	St. ζ in h. auſtralior
———			maculâ 21′ 52″
	0	41	
3	2	40	Stella erat auſtralior macula 21′ 43″ in eodem parallelo cum limbo auſtr. ☾ᵃ.
3	17	20	Stella ζ auſtralior maculâ 20′ 50″
3	26	28	Stella ζ in horario.
		32	Mac. in h. borealior
———			ſtellâ 20′ 19″
		4	
3	36	48	Immerſit ſtella ζ.
4	31	15	Emerſit.
4	51	52	St. ζ in horario.
	54	15	Mac. in h. borealior
———			ſtellâ 13′ 24″
	2	23	

5ʰ	4′	5″	St. ζ in horario.
	6	47	Mac. in h. borealior
———			ſtellâ 11′ 58″
	2	42	
5ʰ	15′	32″	St. ζ in horario.
	18	33	Mac. in h. borealior
———			ſtellâ 10′ 57″
	3	1	
5	30	20	St. ζ in horario.
	33	44	Mac. in h. borealior
———			ſtellâ 9′ 31″
	3	24	
5	39	47	St. ζ in horario.
	43	25	Mac. in h. borealior
———			ſtellâ 8′ 28″
	3	38	
6	0	0	St. ζ in horario.
	4	12	Mac. in h. borealior
———			ſtellâ 5′ 53″.
	4	12	

Oct. 22 mane ☾ᵃ ad ſtellam ζ ♋.

2ʰ	4′	16″	Macula in horario.
	19	18	St. ζ in h. auſtralior
———			maculâ 9′ 27″
	5	2	

2ʰ	22′	1″	Macula in horario.
	36	32	St. ζ in h. auſtralior
———			maculâ 7′ 54″.
	4	31	

Hic capta Diameter ☾ᵃ 31′ 49″. Mora in hor. 2′ 17″; altit. ☾ᵃ 44°.

Macula occidentalior limbo ortivo ☾ᵃ 0′ 14″ penduli, & borealior auſtrino 19′ 36″ circuli.

2^h 45′ 41″	Macula in horario.		
59 30	St. ζ in h. auſtralior maculâ	5′ 56″	
13 49			
3 2 50	Macula in horario.		
16 12	St. ζ in h. auſtralior maculâ	4′ 18″	
13 22			
5 43 0	Macula in horario.		
52 21	St. ζ in h. auſtralior maculâ	14′ 24″	
9 21			

5^h 54′ 46″	Macula in horario.	
6 3 52	St. ζ in h. auſtralior maculâ	16′ 6″
9 6		
6 6 3	Macula in horario.	
14 51	St. ζ in h. auſtralior maculâ	17′ 36″.
8 48		

Nov. 3 veſpere ☾^{a} obtexit ſtellam anonymam, quæ in Zod. ſtell. Flamſt. ponitur in ♐ 25° 37′ cum latitud.. auſtr. 0° 20′; ſcilicet ad annum illum 1690.

5^h 40′ 0″ Capta eſt Diameter ☾^{æ} 30′ 19″. Ejus mora in hor. 2′ 14″ penduli; ☾^{a} tum alta 21°. Tum

5 46 49 Macula in horario.

48 49 Stella in hor. auſtralior maculâ 3′ 49″

2 0

5 52 2 Immerſio ſtellæ bene viſa, diſtabatque immergens a cornu auſtrino ☾^{æ} 23′ 41″.

Macula erat orientalior limbo occiduo ☾^{æ} 0′ 19″ penduli, & borealior limbo auſtrino 21′ 10″, neque plus licuit ☾^{a} ad occaſum properante.

Nov. 4 veſpere ☾ᵃ ad ſtellam • ♐.

5^h	29′	26″	Macula in horario.
	42	56	St. • in h. borealior
———			maculâ 19′ 8″
	13	30	
5	45	14	Macula in horario.
	58	20	St. • in h. borealior
———			maculâ 17′ 34″
	13	6	
6	1	14	Macula in horario.
		52	Cornu boreum in h.
	2	7	Cornu auſtr. in h.
———			
		15	Differentia horaria.
		7½	Semiſſis differentiæ.
	1	59½	Igitur centr. ☾ᵃ in h.
		45½	A mac. ad centr.
		21	A limbo occ. ad mac.
			ergo
	1	6½	Semimora ☾ᵃ in hor.
	2	13	Mora tota ☾ᵃ in h.
			Tum vero capta fuit.

Diam. ☾ᵃ 30′ 49″; altit. ☾ᵃ 21°. Capta item mora in h. 2′ 13″ eadem, quæ ſupra. Macula orientalior limbo occid. 0′ 21″ ut ſupra, & borealior auſtrino 23′ 1″.

6^h	16′	19″	Macula in horario.
	28	38	St. • in h. borealior
———			maculâ 14′ 4″
	12	19	
6	38	9	Macula in horario.
	49	51	St. • in h. borealior
———			maculâ 11′ 18″
	11	42	
6	52	17	Macula in horario.
7	3	37	St. • in h. borealior
———			maculâ 9′ 40″
	11	20	
7	5	18	Macula in horario.
	16	17	St. • in h. borealior
———			maculâ 7′ 57″ dub.
	10	59	

Nov. 5 veſpere comparata ☾ᵃ cum ſtellula, quæ in Zodiac. ſtell. Flamſt. ponitur proxima ad ortum ſtellæ f in ſtrophio Sagitarii in ♑ 22° 5′, cum lat. bor. 1° 57′; ad annum ſcilicet 1690.

$5^h\ 39'\ 31''$ Macula in horario.
40 15 St. *f* in h. auſtralior
——— maculâ $2'\ 17''$
0 44
5 42 27 Macula in horario.
43 6½ St. *f* in h. auſtralior
——— maculâ $2'\ 47''$
0 39½
5 49 21 Macula in horario.
51½ St. *f* in h. auſtralior
——— maculâ $3'\ 55''$.
30½

Hic capta Diam. ☾ $31'\ 13''$; alt. 27°. Mora in hor. $2'\ 16''$ penduli. Macula oriental. limbo occid. $1'\ 21''$ penduli, & borealior auſtrino $0'\ 33½''$ circuli.

$6^h\ 7'\ 40''$ Viſa ſtella in linea cornuum ☾ diſtans a boreo $37'\ 38''$.
6 25 50 Stella in horario.
26 15 Mac. eadem in h. borealior ſtella $9'\ 21''$
6 41 10 St. *f* in horario.
59 Mac. ead. in h. bor.
——— ſtellâ $11'\ 41''$
49

$6^h\ 45'\ 15''$ St. *f* in horario.
46 47 Mac. ead. in h. bor.
——— ſtellâ $12'\ 23''$
0 56
6 49 48 St. *f* in horario.
50 49½ Mac. ead. in h. bor.
——— ſtellâ $13'\ 5''$
1 1½
6 54 21 St. *f* in horario.
55 30 Mac. ead. in h. bor.
——— ſtellâ $13'\ 44''$
1 9
7 1 9 St. *f* in horario.
2 30 Mac. ead. in h. bor.
——— ſtellâ $14'\ 56''$
1 21
7 4 49 St. *f* in horario.
6 14 Mac. ead. in h. bor.
——— ſtellâ $15'\ 24''$
1 25
7 52 45 St. *f* in horario.
55 30 Mac. ead. in h. bor.
——— ſtellâ $23'\ 41''$
2 45
7 58 16 St. *f* in horario.
8 1 9 Mac. ead. in h. bor.
——— ſtellâ $24'\ 42''$.
2 53

8^h	6′	4″	St. *f* in horario.	8^h	13′	9″	St. *f* in horario.
	9	9	Mac. ead. in h. bor.		16	29	Mac. ead. in h. bor.
	——	——	ſtellâ 26′ 9″		——	——	ſtellâ 27′ 26″.
	3	5			3	20	

Nov. 6 veſpere ☾^{a} cum ſtella τ, quæ eſt in crinibus poſt aurem dextram Capricorni, ac primum capta Diam. ☾^{x} 31′ 35″; ☾^{a} alta 33°. Mora in hor. 2′ 14″ pend.

5^h	34′	47″	Macula in horario.	6^h	3′	21″	Macula in horario.
	36	46	St. τ in h. borealior		4	36	St. τ in h. borealior
	——	——	maculâ 42′ 30″		——	——	maculâ 37′ 36″
	1	59			1	15	
5	38	22	Macula in horario.	6	6	43	Macula in horario.
	40	10	St. τ in h. borealior		7	51	St. τ in h. borealior
	——	——	maculâ 41′ 58″		——	——	maculâ 37′ 6″
	1	48			1	8	
5	41	45	Macula in horario.	6	9	30	Macula in horario.
	43	27	St. τ in h. borealior		10	34	St. τ in h. borealior
	——	——	maculâ 41′ 30″		——	——	maculâ 36′ 45″
	1	42			1	4	
5	46	32	Macula in horario.	6	20	47	Macula in horario.
	48	9	St. τ in h. borealior		21	37	St. τ in h. borealior
	——	——	maculâ 40′ 28″		——	——	maculâ 34′ 44″
	1	37			0	50	
5	58	48	Macula in horario.	6	24	4	Macula in horario.
6	0	6	St. τ in h. borealior			50	St. τ in h. borealior
	——	——	maculâ 38′ 31″		——	——	maculâ 33′ 56″.
	1	18				46	

6h	26′	41″	Macula in horario.
	27	21	St. τ in h. borealior
———			maculâ 33′ 39″
	0	40	
6	30	17	Macula in horario.
		52	St. τ in h. borealior
———			maculâ 33′ 3″
		35	
8	6	38	St. τ in horario.
	8	23	Mac. in h. auſtralior
———			ſtellâ 14′ 29″
	1	45	
8	10	24	St. τ in horario.
	12	17	Mac. in h. auſtralior
———			ſtellâ 13′ 49″
	1	53	
8	14	21	St. τ in horario.
	16	19	Mac. in h. auſtralior
———			ſtellâ 12′ 51″
	1	58	
8	18	31	St. τ in horario.
	20	36	Mac. in h. auſtralior
———			ſtellâ 12′ 2″
	2	5	

8h	23′	25″	St. τ in horario.
	25	39	Mac. in h. auſtralior
———			ſtellâ 11′ 12″
	2	14	
8	27	36	St. τ in horario.
	29	56	Mac. in h. auſtralior
———			ſtellâ 10′ 7″
	2	20	
8	41	15	St. τ in horario.
	43	56	Mac. in h. auſtralior
———			ſtellâ 7′ 28″
	2	41	
8	46	55	St. τ in horario.
	49	48	Mac. in h. auſtralior
———			ſtellâ 6′ 5″
	2	53	
8	56	4	St. τ in horario.
	59	10	Mac. in h. auſtralior
———			ſtellâ 4′ 12″
	3	6	
9	5	31	St. τ in horario.
	8	54	Mac. in h. auſtralior
———			ſtellâ 2′ 10″.
	3	23	

Macula orientalior limbo occiduo 0′ 44″ penduli, & borealior auſtrino 19′ 39″ circuli.

Nov. 7 veſpere ☾ᵃ comparata cum ſtella λ majuſcula duarum, quæ ſunt in cauda ♑, & primum capta Diam. ☾ᵃ 32′ 1″; ☾ᵃ alta 36°. Mora in hor. 2′ 13″ penduli.

5^h	$21'$	$56''$	Macula in horario.
	38	58	St. λ in h. auſtralior
	———		maculâ $8'$ $7''$
	17	2	
5	41	46	Macula in horario.
	58	19	St. λ in h. auſtralior
	———		maculâ $11'$ $58''$
	16	33	

6^h	$2'$	$25''$	Macula in horario.
	18	31	St. λ in h. auſtralior
	———		maculâ $15'$ $53''$
	16	6	
6	29	35	Macula in horario.
	45	5	St. λ in h. auſtralior
	———		maculâ $21'$ $21''$.
	15	30	

Macula orientalior limbo occiduo $1'$ $16''$ penduli, & borealior auſtrino $9'$ $7''$ circuli.

Nov. 8 veſpere ☾ª cum ſtella κ in ore urnæ Aquarii.

7^h	$40'$	$10''$	Macula in horario.
	53	58	St. κ in h. borealior
	———		maculâ $56'$ $52''$
	13	48	
7	56	10	Macula in horario.
8	9	35	St. κ in h. borealior
	———		maculâ $53'$ $16''$
	13	25	
8	12	51	Macula in horario.
	25	52	St. κ in h. borealior
	———		maculâ $49'$ $0''$
	13	1	
8	41	59	Macula in horario.
	54	22	St. κ in h. borealior
	———		maculâ $42'$ $38''$
	12	23	

9^h	$0'$	$56''$	Macula in horario.
	12	51	St. κ in h. boreal.
	———		maculâ $38'$ $12''$
	11	55	
9	30	25	Macula in horario.
	41	38	St. κ in h. boreal.
	———		maculâ $31'$ $26''$
	11	13	
9	45	39	Macula in horario.
	56	28	St. κ in h. boreal.
	———		maculâ $27'$ $47''$
	10	49	
10	14	12	Macula in horario.
	24	16	St. κ in h. boreal.
	———		maculâ $20'$ $47''$.
	10	4	

10^h

10^h	27′	27″	Macula in horario.
	37	11	St. κ in h boreal.
	———		maculâ 17′ 32″
	9	44	
10	39	33	Macula in horario.
	48	59	St. κ in h. boreal.
	———		maculâ 14′ 29″
	9	26	
10	50	49	Macula in horario.
	59	56	St. κ in h. boreal.
	———		maculâ 11′ 56″
	9	7	
11	2	17	Macula in horario.
	11	3	St. κ in h. boreal.
	———		maculâ 9′ 3″
	8	46	

11^h	14′	21″	Macula in horario.
	22	49	St. κ in h. boreal.
	———		maculâ 6′ 14″
	8	28	
11	25	15	Macula in horario.
	33	25	St. κ in h. boreal.
	———		maculâ 3′ 32″
	8	10	
11	37	19	Macula in horario.
	44	57	St. κ in h. boreal.
	———		maculâ 0′ 41″
	7	47	
11	51	1	Macula in horario.
	58	22	St. κ in h. auſtral.
	———		maculâ 2′ 52″.
	7	21	

Circa 10^h capta Diam. ☾* 32′ 50″. Mora in hor. 2′ 15″ penduli, alt. circiter 30°. Macula orientalior limbo occiduo 0′ 47½″, & borealior auſtrino 29′ 18″ circuli.

Nov. 9 veſpere ☾* ad ſtellam χ in ventre Piſcis majuſculam duarum, quæ ibi ſunt.

7^h	44′	45″	Macula in horario.
	54	34	St. χ in h. borealior
	———		maculâ 51′ 16″
	9	49	
7	56	43	Macula in horario.
8	6	16	St. χ in h. borealior
	———		maculâ 48′ 18″
	9	33	

8^h	7′	28″	Macula in horario.
	16	45	St. χ in h. borealior
	———		maculâ 45′ 49″
	9	17	
8	18	59½	Macula in horario.
	28	0	St. χ in h. borealior
	———		maculâ 42′ 58″.
	9	0½	

$8^h\ 30'\ 41\frac{1}{2}''$ Macula in horar.
39 28 St. χ in h. boreal.
——— maculâ 40′ 17″
8 46½

8 41 17 Macula in horario.
49 47 St. χ in h. boreal.
——— maculâ 37′ 36″.
8 30

Hic capta Diam. ☾^{æ} 33′ 18″, alt. 48°. Mora ☾^{æ} in h. 2′ 15″ pend. Macula oriental. limbo occ. 1′ 15″ pend., & borealior auſtrino 22′ 28″.

$9^h\ 20'\ 8''$ Macula in horario.
27 42 St. χ in h. boreal.
——— maculâ 28′ 28″
7 34

9 31 18½ Macula in horario.
38 39 St. χ in h. boreal.
——— maculâ 25′ 32″
7 20½

9 40 34 Macula in horario.
47 40 St. χ in h. boreal.
——— maculâ 23′ 26″
7 6

9 57 51 Macula in horario.
10 4 30 St. χ in h. boreal.
——— maculâ 19′ 11″
6 39

$10^h\ 15'\ 26''$ Macula in horario.
21 40 St. χ in h. boreal.
——— maculâ 14′ 56″
6 14

10 34 16 Macula in horario.
40 0 St. χ in h. boreal.
——— maculâ 10′ 21″
5 44

10 51 25 Macula in horario.
56 43 St. χ in h. boreal.
——— maculâ 6′ 12″
5 18

10 57 57 Macula in horario.
11 3 4 St. χ in h. boreal.
——— maculâ 4′ 39″
5 7

11 9 11 Macula in horario.
13 59 St. χ in h. boreal.
——— maculâ 1′ 58″
4 48

11 24 38 Macula in horario.
29 2 St. χ in h. auſtral.
——— maculâ 2′ 0″.
4 24

11 33 27 Macula in horario.
37 36 St. χ in h. auſtral.
——— maculâ 3′ 57″.
4 9

$11^h\ 47'\ 20''$ Macula in horario.
51 4 St. χ in h. auſtral.
——— maculâ $7'\ 28''$.
3 44
Tum poſt med. noct. Nov.
10 mane
$0^h\ 4'\ 18''$ Macula in horario.
7 33 St. χ in h. auſtral.
——— maculâ $11'\ 26''$
3 15
0 18 2 Macula in horario.
20 54 St. χ in h. auſtral.
——— maculâ $14'\ 37''$
2 52

$0^h\ 32'\ 45''$ Macula in horario.
35 9 St. χ in h. auſtralior
——— maculâ $18'\ 9''$.
2 24
Et hic denuo capta Diam.
☾^{a} $33'\ 2''$; ☾^{a} alta circiter $20°$.
$0^h\ 44'\ 46''$ Macula in horario.
46 46 St. χ in h. auſtralior
——— maculâ $21'\ 14''$
2 0
0 51 42 Macula in horario.
53 29 St. χ in h. auſtralior
——— maculâ $22'\ 51''$.
1 47

Et abiit ☾^{a} poſt culmina tectorum.

Nov. 13 veſpere ☾^{a} cum ſtella ζ in cauda ♈.

$7^h\ 23'\ 38''$ Macula in horario.
27 56 St. ζ in h. borealior
——— maculâ $42'\ 59''$
4 18
7 29 39 Macula in horario.
33 44 St. ζ in h. borealior
——— maculâ $41'\ 35''$
4 5
7 36 35 Macula in horario.
40 23 St. ζ in h. borealior
——— maculâ $40'\ 22''$
3 48

$7^h\ 44'\ 14''$ Macula in horario.
47 47 St. ζ in h. borealior
——— maculâ $38'\ 53''$
3 33
7 51 43 Macula in horario.
54 58 St. ζ in h. borealior
——— maculâ $37'\ 22''$.
3 15

Tum capta Diameter ☾æ 34′ 0″; ☾æ alt. 40°. Mora ☾æ in hor. 2′ 28″ penduli. Macula orientalior limbo occiduo ☾æ 1′ 53″ penduli, & auſtralior boreo 6′ 28″ circuli. Plura per nubes non licuit.

Nov. 14 veſpere ☾æ ad ſtellam υ ſupra oculum ſiniſtrum Tauri, quam etiam occultavit Obſervatio facta Teleſcopio 8 ped. quod exigua eſſet differentia declinationum.

8^h	1′	13″	Macula in horario.	
	10	37	St. υ in h. borealior	
	———		maculâ	13′ 5″
	9	24		
8	12	8	Macula in horario.	
	21	6	St. υ in h. borealior	
	———		maculâ	11′ 42″
	8	58		
8	22	19	Macula in horario.	
	30	52	St. υ in h. borealior	
	———		maculâ	10′ 15″
	8	33		
8	32	10	Macula in horario.	
	40	21½	St. υ in h. borealior	
	———		maculâ	8′ 52″
	8	11½		
8	43	2	Macula in horario.	
	50	47	St. υ in h. borealior	
	———		maculâ	7′ 18″.
	7	45		

Hic capta Diam. ☾æ 33′ 50″; ☾æ alt. 40°. Mora in h. 2′ 29″ penduli. Macula occidentalior limbo ort. 0′ 30″ pend. & auſtralior boreo 7′ 30″.

9^h	3′	39″	Macula in horario.	
	10	38	St. υ in h. borealior	
	———		maculâ	4′ 32″
	6	56		
9	12	44	Macula in horario.	
	19	23	St. υ in h. borealior	
	———		maculâ	3′ 22″
	6	39		
9	21	33	Macula in horario.	
	27	43	St. υ in h. borealior	
	———		maculâ	2′ 6″
	6	10		
9	30	21	Macula in horario.	
	36	23	St. υ in h. borealior	
	———		maculâ	1′ 2″.
	6	2		

9^h 40′ 0″	Macula in horario.	
45 42	St. υ in h. auſtralior	
———	maculâ	0′ 21″
5 42		
9 57 35	Macula in horario.	
10 2 40	St. υ in h. auſtral.	
———	maculâ	2′ 20″
5 5		
10 5 17	Macula in horario.	
10 8	St. υ in h. auſtral.	
———	maculâ	3′ 16″
4 51		
10 28 13½	Macula in horario.	
32 18	St. υ in h. auſtral.	
———	maculâ	5′ 51″
4 4½		
10 43 52	Macula in horario.	
47 25	St. υ in h. auſtral.	
———	maculâ	7′ 43″
3 33		
10 58 4	Macula in horario.	
11 1 11	St. υ in h. auſtral.	
———	maculâ	8′ 58″
3 7		
11 5 36	Macula in horario.	
8 26	St. υ in h. auſtral.	
———	maculâ	9′ 50″
2 50		

11^h 11′ 2″	Macula in horario.	
13 43	St. υ in h. auſtral.	
———	maculâ	10′ 21″
2 41		
11 29 32	Macula in horario.	
31 39	St. υ in h. auſtral.	
———	maculâ	12′ 3″
2 7		
11 37 1	Macula in horario.	
38 54	St. υ in h. auſtral.	
———	maculâ	12′ 40″
1 53		
11 45 27	Macula in horario.	
47 2	St. υ in h. auſtral.	
———	maculâ	13′ 36″
1 35		
11 54 21	Macula in horario.	
55 41	St. υ in h. auſtral.	
———	maculâ	14′ 8″;
1 20	& poſt med. noct.	
	Nov. 15 mane	
0 2 24	Macula in horario.	
3 30	St. υ in h. auſtral.	
———	maculâ	14′ 44″
1 6		
0 12 21	Macula in horario.	
13 6½	St. υ in h. auſtral.	
———	maculâ	15 38″.
0 45½		

0^h 26′ 53″ Plus minus 15″ facta eſt Immerſio ſtellæ ν.
1 33 25 Plus minus 3″ fuit
——— Emerſio ſtellæ, &
1 6 32 Mora occultationis.
1 40 3 Stella ν in horario.
42 1 Mac. in hor. boreal.
——— ſtellâ 20′ 47″
1 58

1^h 46′ 22″ St. ν in horario.
48 32 Mac. in h. borealior
——— ſtellâ 21′ 5″
2 10
1 55 5 St. ν in horario.
57 31 Mac. in h. borealior
——— ſtellâ 21′ 33″.
2 26
Plura per nubes non licuit.

Nov. 16 veſpere ☾ª ad ſtellam μ ♊ in calce Caſtoris.

9^h 10′ 11″ St. μ in horario.
14 49 Mac. in h. auſtralior
——— ſtellâ 30′ 15″
4 38
9 16 26 St. μ in horario.
21 20 Mac. in h. auſtralior
——— ſtellâ 30′ 17″
4 54
9 22 41 St. μ in horario.
27 51 Mac. in h. auſtralior
——— ſtellâ 30′ 4″
5 10
9 29 18 St. μ in horario.
34 44 Mac. in h. auſtralior
——— ſtellâ 30′ 4″
5 26

9^h 36′ 20½″ St. μ in horario.
42 2½ Mac. in h. auſtral.
——— ſtellâ 30′ 5″
5 42
9 44 53 St. μ in horario.
50 56 Mac. in h. auſtral.
——— ſtellâ 29′ 56″
6 3
9 53 38 St. μ in horario.
10 0 4 Mac. in h. auſtral.
——— ſtellâ 29′ 46″
6 26
10 1 59 St. μ in horario.
8 42 Mac. in h. auſtral.
——— ſtellâ 29′ 57″.
6 43

10^h	19′	25″	St. μ in horario.	
	26	50	Mac. in h. auſtral.	
			ſtellâ	29′ 51″
	7	25		
10	28	25½	St. μ in horario.	
	36	10	Mac. in h. auſtral.	
			ſtellâ	29′ 51″
	7	44½		

10^h	38′	19″	St. μ in horario.	
	46	46	Mac. in h. auſtral.	
			ſtellâ	29′ 56″
	8	27		
10	49	13	St. μ in horario.	
	57	55	Mac. in h. auſtral.	
			ſtellâ	29′ 46″.
	8	42		

Hic capta Diam. ☾ᵉ 33′ 11″; ☾ᵃ alta 42°. Mora in hor. 2′ 27″ penduli. Macula occidentalior limbo ort. ☾ᵉ 0′ 19″ pend. auſtralior boreo 10′ 25″.

11	30	19	St. μ in horario.	
	40	15	Mac. in h. auſtral.	
			ſtellâ	30′ 24″
	9	56		
11	44	32	St. μ in horario.	
	54	57	Mac. in h. auſtral.	
			ſtellâ	30′ 42″
	10	25		
11	57	3	St. μ in h. & p. m. n.	
0	7	54	Mac. in h. auſtral.	
			ſtellâ	30′ 53″
	10	51		

0^h	30′	17″	St. μ in horario.	
	42	12	Mac. in h. auſtralior	
			ſtellâ	31′ 53″
	11	55		
3	36	43	St. μ in horario.	
	54	5	Mac. in h. auſtralior	
			ſtellâ	44′ 27″
	17	22		
4	1	37	St. μ in horario.	
	19	44	Mac. in h. auſtralior	
			ſtellâ	47′ 4″.
	18	7		

Hic rurſus capta Diam. ☾ᵉ 32′ 54″; ☾ᵃ alta 45° non concordat cum ſuperiore. Suſpicio eſt ſupra pro Revolutionibus $25\frac{16}{40}$ = 32′ 52″, per errorem numeratas fuiſſe Revol. $25\frac{26}{40}$ = 33′ 11″.

Nov. 20 mane ☾ª ad ſtellam *b* in extremitate pedis dextri anterioris ♌. Ac primum capta Diam. ☾ª 31′ 11″; ☾ª alta 60°. Mora in hor. 2′ 11″. Macula occidentalior limbo ortivo 0′ 12″ penduli, & borealior limbo auſtrino 17′ 23″ circuli.

5ʰ 18′ 20″ Macula in horario.
24 26½ Stella *b* in horario auſtralior maculâ 33′ 7″
———
6 6½

5 26 30 Macula in horario.
32 25 St. *b* in h. auſtralior
——— maculâ 31′ 58″
5 55

5 35 20 Macula in horario.
41 5 St. *b* in h. auſtralior
——— maculâ 29′ 59″
5 45

5 43 49 Macula in horario.
49 24 St. *b* in h. auſtralior
——— maculâ 28′ 45″
5 35

5ʰ 58′ 57″ Macula in horario.
6 4 14 St. *b* in h. auſtralior
——— maculâ 25′ 43″
5 17

6 7 35 Macula in horario.
12 38 St. *b* in h. auſtralior
——— maculâ 24′ 4″
5 3

6 26 21 Macula in horario.
31 3 St. *b* in h. auſtralior
——— maculâ 20′ 18″.
4 42

Nov. 22 mane comparata ☾ª cum ſtella *U* in ſiniſtro pede poſteriore ♌, quam quidem ☾ª texerat, ſed nihil vidi niſi paulo poſt Emerſionem.

4ʰ 26′ 23″ Stella *U* in horario.
28 42 Limbus ☾ª ortivus in hor. & limbus auſtralis auſtralior
——— ſtellâ — — — 14′ 8″.
2 19

4ʰ

4^h	32′	17″	St. *U* in horario.
	34	43	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	2	26	ſtellâ 15′ 12″
4	44	17	St. *U* in horario.
	46	57	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	2	40	ſtellâ 17′ 44″
4	51	5	St. *U* in horario.
	54	5	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	3	0	ſtellâ 19′ 33″
5	13	11	St. *U* in horario.
	16	27	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	3	16	ſtellâ 23′ 41″.

Hic capta Diam. ☾^{a} 30′ 42″; ☾^{a} alta 46°. Mora in hor. 2′ 5″ penduli.

5^h	31′	2″	St. *U* in horario.
	33	13	Cornu auſtr. in hor.
	33	58	Cornu bor. in hor.
	34	37	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	3	35	ſtellâ 27′ 3″
5^h	38′	10″	St. *U* in horario.
	41	56	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	3	46	ſtellâ 28′ 39″
6	1	9	St. *U* in horario.
	5	22	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	4	13	ſtellâ 33′ 25″
6	9	45	St. *U* in horario.
	14	9	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	4	24	ſtellâ 35′ 0″
6	16	17	St. *U* in horario.
	20	48	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	4	31	ſtellâ 36′ 20″
6	26	39	St. *U* in horario.
	31	23	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	4	44	ſtellâ 38′ 24″
6	33	4	St. *U* in horario.
	37	55	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	4	51	ſtellâ 39′ 42″
6	39	37	St. *U* in horario.
	44	36	L. ☾^{a} ort. in hor. &
	———		limb. auſtralis auſtral.
	4	59	ſtellâ 40′ 54″.

Nov. 23 mane ☾^{a} cum ſtella *e* in pede dextro anteriore ♌.

3^{h}	8′	33″	St. *e* in horario.	
	18	29	Mac. in h. auſtralior ſtellâ	38′ 57″
	9	56		
3	23	38	St. *e* in horario.	
	34	1	Mac. in h. auſtralior ſtellâ	
	10	23		
3	38	41	St. *e* in horario.	
	49	23	Mac. in h. auſtralior ſtellâ	
	10	42		

4^{h}	7′	48″	St. *e* in horario.	
	19	11	Mac. in h. auſtralior ſtellâ	51′ 26″
	11	23		
4	21	51	St. *e* in horario.	
	33	35	Mac. in h. auſtralior ſtellâ	54′ 21″.
	11	44		

Diameter ☾^{a} 30′ 9″.

Mora in hor. 2′ 4″; ☾^{a} tum alta 24½°.

Macula occidentalior limbo ortivo 0′ 28″ penduli, & borealior auſtrino 26′ 26″.

Dec. 4 veſpere ☾^{a} comparata cum ſtella *ν*, quæ eſt in manu dextra Aquarii.

5^{h}	14′	44″	St. *ν* in horario.	
	20	5	Mac. in h. auſtralior ſtellâ	49′ 51″
	5	21		
5	22	15	St. *ν* in horario.	
	27	48	Mac. in h. auſtralior ſtellâ	48′ 10″
	5	33		
5	29	58	St. *ν* in horario.	
	35	42	Mac. in h. auſtralior ſtellâ	46″ 34″
	5	44		

5^{h}	38′	3″	St. *ν* in horario.	
	43	59	Mac. in h. auſtralior ſtellâ	44′ 54″
	5	56		
5	46	47	St. *ν* in horario.	
	52	59	Mac. in h. auſtralior ſtellâ	42′ 57″
	6	12		
5	55	40	St. *ν* in horario.	
6	1	57	Mac. in h. auſtralior ſtellâ	41′ 18″.
	6	17		

6^h	3′	52″	St. ν in horario.
	10	27	Mac. in h. auſtralior
			ſtellâ 39′ 21″
	6	35	
6	12	45	St. ν in horario.
	19	33	Mac. in h. auſtralior
			ſtellâ 37′ 17″
	6	48	
6	21	20	St. ν in horario.
	28	19	Mac. in h. auſtralior
			ſtellâ vacat.
	6	59	
6	53	26	St. ν in horario.
7	1	15	Mac. in h. auſtralior
			ſtellâ 28′ 24″
	7	49	
7	4	33	St. ν in horario.
	12	39	Mac. in h. auſtralior
			ſtellâ 26′ 6″
	8	6	

7^h	15′	14″	St. ν in horario.
	23	37	Mac. in h. auſtralior
			ſtellâ 23′ 43″
	8	23	
7	26	46	St. ν in horario.
	35	31	Mac. in h. auſtralior
			ſtellâ 21′ 7″
	8	45	
7	37	6	St. ν in horario.
	46	4	Mac. in h. auſtralior
			ſtellâ 18′ 53″
	8	58	
7	47	43	St. ν in horario.
	57	0	Mac. in h. auſtralior
			ſtellâ 16′ 24″.
	9	17	

Diam. ☾æ 31′ 38″; ☾a alta 29°. Mora ☾æ in hor. 2′ 12″ penduli.

Macula orientalior limbo occiduo ☾æ 0′ 30″ penduli, & borealior auſtrino 18′ 51″ circuli.

Dec. 7 veſpere ☾a cum ſtella quadam anonyma, quæ in Zod. ſtell. Flamſt. ponitur in ventre Piſcis prope caudam in ♓ 23° 55′ cum lat. borea 4° 33′ ad ann. nempe 1690; & primum

4^h 40′ 0″ Capta Diam. ☾æ 32′ 40″; ☾æ tum alta 43°. Mora ☾a in hor. 2′ 14½″ penduli.

5ʰ	8′	11″	Stella in horario.
	9	14	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	1	3	ſtellà 2′ 2″
5	14	44	Stella in horario.
	15	56	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	1	12	ſtellà 3′ 26″
5	19	1	Stella in horario.
	20	20	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	1	19	ſtellà 4′ 37″
5	26	34	Stella in horario.
	28	4	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	1	30	ſtellà 6′ 14″
5	32	20	Stella in horario.
	33	58	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	1	38	ſtellà 7′ 40″
5	37	34	Stella in horario.
	39	20	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	1	46	ſtellà 9′ 3″
5	41	51	Stella in horario.
	43	42	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	1	51	ſtellà 10′ 3″

5ʰ	49′	20″	Stella in horario.
	51	22	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	2	2	ſtellà 11′ 58″
5	54	6	Stella in horario.
	56	14	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	2	8	ſtellà 12′ 54″
5	58	30	Stella in horario.
6	0	44½	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	2	14½	ſtellà 14′ 20″
6	3	32	Stella in horario.
	5	54	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	2	22	ſtellà 15′ 14″
6	8	32	Stella in horario.
	11	1	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	2	29	ſtellà 16′ 19″
6	17	27	Stella in horario.
	20	9	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	2	42	ſtellà 18′ 34″
6	23	28	Stella in horario.
	26	18	L. occid. ☾æ in h. &
	———		limb. auſtrin. boreal.
	2	50	ſtellà 19′ 59″.

6ʰ 34′ 11″ Stella in horario.
37 17 L. occid. ☾ᵃ in h. &
——— limb. auſtrin. boreal.
3 6 ſtellâ 22′ 32″
6 41 36 Stella in horario.
44 52 L. occid. ☾ᵃ in h. &
——— limb. auſtrin. boreal.
3 16 ſtellâ 24′ 35″

6ʰ 53′ 45″ Stella in horario.
57 19 L. occid. ☾ᵃ in h. &
——— limb. auſtrin. boreal.
3 34 ſtellâ 27′ 12″.
Hic capta rurſum Diam. ☾ᵃ 32′ 55″; ☾ᵃ alta 46°, & hæc Diameter tutior eſt, quam prior.

Dec. 11 mane ☾ᵃ ad ſtellam δ in cauda Arietis.

1ʰ 37′ 50″ Macula in horario.
54 54 St. δ in h. borealior
——— maculâ 7′ 4″
17 4
1 57 8½ Macula in horario.
2 13 30 St. δ in h. borealior
——— maculâ 5′ 36″
16 21½

2ʰ 40′ 4″ Macula in horario.
54 49 St. δ in h. borealior
——— maculâ 1′ 37″
14 45
3 0 1 Macula in horario.
13 57 St. δ jam auſtralior
——— maculâ 0′ 4″.
13 56

Diam. ☾ᵃ 33′ 21″. Mora in hor. 2′ 26″; ☾ᵃ alta 15½°. Macula orientalior limbo occiduo 2′ 13″ penduli, & borealior auſtrino 14′ 47″.

Dec. 11 veſpere ☾ᵃ ad ſtellam *A* Tauri, quam etiam texit.

5ʰ 17′ 58″ Macula in horario.
33 33 St. *A* in h. borealior
——— maculâ 56′ 48″
15 35

5ʰ 36′ 56″ Macula in horario.
51 45 St. *A* in h. borealior
——— maculâ 53′ 33″.
14 49

5^h	53′	33″	Macula in horario.	6^h	9′	38″	Macula in horario.
6	7	43	St. *A* in h. borealior		23	14	St. *A* in h. borealior
	———		maculâ 50′ 44″		———		maculâ 48′ 6″.
	14	10			13	36	

Diam. ☾ 33′ 46″. Mora in hor. 2′ 29″ penduli. Macula oriental. limb. occid. 1′ 55″ pend. & bor. auſtrin. 27′ 4″ circuli.

8^h	12′	52″	Macula in horario.	9^h	34′	11″	Macula in horario.
	22	20	St. *A* in h. borealior		41	10	St. *A* in h. boreal.
	———		maculâ 29′ 17″		———		maculâ 18′ 53″
	9	28			6	59	
8	27	31	Macula in horario.	11	12	52	Macula in horario.
	36	30	St. *A* in h. borealior		16	53	St. *A* in h. boreal.
	———		maculâ 27′ 12″		———		maculâ 9′ 46″
	8	59			4	1	
8	40	12	Macula in horario.	11	27	21	Macula in horario.
	48	48	St. *A* in h. borealior		30	57	St. *A* in h. boreal.
	———		maculâ 25′ 28″		———		maculâ 8′ 22″
	8	36			3	36	
8	53	8	Macula in horario.	11	36	4	Macula in horario.
	1	19	St. *A* in h. borealior		39	24	St. *A* in h. boreal.
	———		maculâ 23′ 37″		———		maculâ 7′ 56″
	8	11			3	20	
9	5	1	Macula in horario.	11	53	29	Macula in horario.
	12	51	St. *A* in h. borealior		56	17	St. *A* n h. boreal.
	———		maculâ 22′ 10″		———		maculâ 6′ 32″
	7	50			2	48	& poſt med. noct.
9	15	35	Macula in horario.	0	5	28	Macula in horario.
	23	6	St. *A* in h. borealior		7	55	St. *A* in h. boreal.
	———		maculâ 20′ 53″		———		maculâ 6′ 3″.
	7	31			2	27	

0^h 10′ 17″	Macula in horario.	
13 35	St. *A* in h. borealior	
———	maculâ	5′ 47″.
2 18		

Capta denuo Diam. ☾æ 33′ 39″; ☾æ alta 50½°. Neque tubo 6 pedum. Ordinario ſtellam ultra videre potui, tubo 14 pedum vidi eam aliquamdiu; ſed ob vapores & vicinium lumen ☾æ etiam videri deſiit, antequam immergeretur. Immerſa fuiſſe videtur proxime e regione maculæ Hevelius.

Dec. 12 veſpere ☾æ ad ſtellam τ in Tauro, quam etiam texerat; ſed nihil viſum ☾æ poſt tectum templi latente, ſimul autem ac apparuit.

5^h 43′ 31″	St. τ in horario.		6^h 3′ 19″	St. τ in horario.	
45 42	L. ☾æ occid. in h. &		6 21	L. ☾æ occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
2 11		15′ 36″	3 2		17′ 46″
5 47 37	St. τ in horario.		7 8 36	St. τ in horario.	
49 58	L. ☾æ occid. in h. &		11 52	L. ☾æ occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
2 21		15′ 53″	3 16		18′ 34″
5 51 39	St. τ in horario.		6 13 27	St. τ in horario.	
54 10	L. ☾æ occid. in h. &		16 54	L. ☾æ occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
2 31		16′ 22″	3 27		18′ 59″
5 58 32	St. τ in horario.		6 19 7	St. τ in horario.	
6 1 22	L. ☾æ occid. in h. &		22 49	L. ☾æ occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
2 50		17′ 19″	3 42		19′ 25″.

Hic capta Diam. ☾æ 33′ 33″. Mora in h. 2′ 31″; ☾æ alt. 36°.

7^h 11′ 57″	St. τ in horario.		7^h 51′ 6″	St. τ in horario.	
17 47	L. ☾* occid. in h. &		58 23	L. ☾* occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
5 50		25′ 39″	7 17		29′ 41″
7 22 26	St. τ in horario.		8 2 19	St. τ in horario.	
28 41	L. ☾* occid. in h. &		10 0	L. ☾* occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
6 15		26′ 43″	7 41		30′ 49″
7 32 40	St. τ in horario.		8 13 42	St. τ in horario.	
39 18	L. ☾* occid. in h. &		21 49	L. ☾* occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
6 38		27′ 57″	8 7		31′ 52″
7 42 26	St. τ in horario.		8 28 18	St. τ in horario.	
49 24	L. ☾* occid. in h. &		36 54	L. ☾* occid. in h. &	
———	bor. borealior ſtellâ		———	bor. borealior ſtellâ	
6 58		28′ 44″	8 36		33′ 7″.

Hic denuo capta eſt Diam. ☾* 33′ 40″; ☾* alta 51°.

Dec. 13 mane poſt med. noctem comparata ☾* cum ſtella *H* ♊ Propode Geminorum.

2^h 17′ 25″	Macula in horario.		3 22 11	Macula in horario.	
3 17 36	St. *H* ♊ in h. boreal.		4 20 5	St. *H* ♊ in h. boreal.	
———	maculâ	14′ 46″	———	maculâ	17′ 38″.
1 0 11			57 54		

Hic capta Diam. ☾* 33′ 21″; ☾* alta 27°. Mora in hor. 2′ 30″. Macula orientalior limbo occid. 2′ 2½″ pend., & auſtralior boreo 8′ 34″.

4h

4^h	37′	23″	Macula in horario.
5	32	24	St. *H* ♊ in h. boreal.
———			maculâ 22′ 0″
	55	1	

5^h	34′	57″	Macula in horario.
6	27	30	St. *H* ♊ in h. boreal.
———			maculâ 25′ 35″.
	52	33	

Dec. 13 veſpere comparata ☾* cum eadem ſtella *H* primum deinde etiam cum ſtellis ν & μ ♊.

10^h	4′	27″	Macula in horario.
	8	9	St. *H* in h. boreal.
———			maculâ 26′ 52″
	3	42	
10	11	31	Macula in horario.
	15	0	St. *H* in h. boreal.
———			maculâ 26′ 49″
	3	29	
10	16	57	Macula in horario.
	20	15	St. *H* in h. boreal.
———			maculâ 26′ 58″
	3	18	
10	22	9	Macula in horario.
	25	18	St. *H* in h. boreal.
———			maculâ 26′ 45″
	3	9	
10	28	37	Macula in horario.
	31	34	St. *H* in h. boreal.
———			maculâ 26′ 58″
	2	57	

10^h	33′	59″	Macula in horario.
	36	46	St. *H* in h. boreal.
———			maculâ 27′ 4″
	2	47	
10	39	12	Macula in horario.
	41	49	St. *H* in h. boreal.
———			maculâ 27′ 1″
	2	37	
10	56	2	Macula in horario.
	58	10	St. *H* in h. boreal.
———			maculâ 27′ 2″.
	2	8	

Hic capta Diam. ☾* 33′ 28″; ☾* alt. 65°. Mora in h. 2′ 28½″. Macula occid. limb. ort. 0′ 22½″ pend. & auſtral. boreo 10′ 3″ circuli.

11^h	15′	11″	Macula in horario.
	16	43	St. *H* in h. boreal.
———			maculâ 27′ 24″.
	1	32	

11h	23′	38″	Macula in horario.
	24	56	St. *H* in h. boreal.
———			maculâ 27′ 40″
	1	18	
11	29	18	Macula in horario.
	30	25	St. *H* in h. boreal.
———			maculâ 27′ 42″
	1	7	
11	40	43	Macula in horario.
	41	34	St. *H* in h. boreal.
———			maculâ vacat.
	0	51	Et poſt med. noct.
			Dec. 14 mane
0	3	44	Macula in horario.
		50	St. *H* in. h. boreal.
———			maculâ 29′ 4″
		6	
0	19	4	St. *H* in horario.
		25	Mac. jam auſtralior
———			ſtellâ 29′ 40″
		21	
0	40	14	St. *H* in horario.
	41	19	Macula auſtralior
———			ſtellâ 30′ 24″
	1	5	
0	51	8	ν | auſtral. 42′ 5″
	59	8	μ | ſtel. *H* 38 12
1	2	26	St. *H* in horario.
	4	5	Macula auſtralior
———			ſtellâ 31′ 40″
	1	39	

1h	13′	13″	ν | auſtral. 42 3
	21	14	μ | ſtel. *H* 38 14
1	32	59	St. *H* in horario.
	35	35	Macula auſtralior
———			ſtellâ 33′ 56″
	2	36	
1	43	47	ν | auſtral. 42 11
	51	49	μ | ſtel. *H* 38 24
3	25	40	St. *H* in horario.
	31	57	Macula auſtralior
———			ſtellâ 44′ 10″
	6	16	
3	36	30	ν | auſtral. 42 3
	44	31	μ | ſtel. *H* vacat.
3	46	18	St. *H* in horario.
	53	19	Macula auſtralior
———			ſtellâ 46′ 45″
	7	1	
3	57	8	ν | auſtral. 42 17
4	5	9	μ | ſtel. *H* 38 31
4	8	11	St. *H* in horario.
	16	0	Macula auſtralior
———			ſtellâ 49′ 8″
	7	49	
4	19	1½	ν | auſtral. 42 5
	27	3	μ | ſtel. *H* 38 19
4	29	14	St. *H* in horario.
	37	48	Macula auſtralior
———			ſtellâ 51′ 52″.
	8	34	

4^h	$40'$	$3''$	η ſtell. *H*	$42'\ 11''$
	51	32	Macula in horario.	
	53	16	St. η in h. borealior	
——	——	——	maculâ	$11'\ 27''$
	1	44		
5	1	17	St. μ in h. borealior	
			maculâ	$15'\ 11''$
5	6	34	Macula in horario.	
	7	46	St. η in h. borealior	
——	——	——	maculâ	$13'\ 20''$
	1	12		
5	15	47	St. μ in h. borealior	
			maculâ	$16'\ 55''$
5	23	29	Macula in horario.	
	24	2	St. η in h. borealior	
——	——	——	maculâ	$15'\ 34''$
	0	33		
5	29	21	Macula in horario.	
		39½	St. η in h. borealior	
——	——	——	maculâ	$16'\ 21''$
		18½		
5	34	31	Macula in horario.	
		37	St. η in h. borealior	
——	——	——	maculâ	vacat.
		6		
5	39	42	St. η in horario.	
		49½	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$17'\ 36''$
		7½		

5^h	$44'$	$38''$	St. η in horario.	
		57	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$18'\ 10''$
		19		
5	51	8	St. η in horario.	
		42	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$19'\ 13''$
		34		
5	55	2	St. η in horario.	
		46	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$19'\ 52''$
		44		
5	57	38	St. η in horario.	
	58	28	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$20'\ 11''$
	0	50		
6	0	47	St. η in horario.	
	1	49	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$20'\ 22''$
	1	2		
6	4	20	St. η in horario.	
	5	29	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$21'\ 1''$
	1	9		
6	10	59	St. η in horario.	
	12	26½	Mac. in h. auſtralior	
——	——	——	ſtellâ η	$21'\ 54''$.
	1	27½		

6h	16′	27″	St. ν in horario.		
	18	10	Mac. in h. auſtralior		
	———		ſtellâ ν	22′	48″
	1	43			
6	20	15	St. ν in horario.		
	22	7	Mac. in h. auſtralior		
	———		ſtellâ ν	23′	9″
	1	52			

6h	24′	33″	St. ν in horario.		
	26	35	Mac. jam auſtralior		
	———		ſtellâ ν	23′	52″
	2	2			
6	35	4	St. ν ♊ in horario.		
	43	5	St. μ ♊ in h. boreal.		
	———		ſtellâ ν	3′	41″.
	8	1			

Dec. 14 veſpere ☾ª cum ſtella ζ ♊, quam etiam texit Obſervatio facta teleſcopio 8 pedum.

7h	50′	6″	Macula in horario.		
	56	43	St. ζ ♊ in h. auſtral.		
	———		maculâ	15′	2″
	6	37			
7	58	57	Macula in horario.		
8	5	13½	St. ζ ♊ in h. auſtral.		
	———		maculâ	14′	47″
	6	16½			
8	7	19	Macula in horario.		
	13	17	St. ζ ♊ in h. auſtral.		
	———		maculâ	14′	31″
	5	58			
8	14	48	Macula in horario.		
	20	27	St. ζ ♊ in h. auſtral.		
	———		maculâ	14′	19″
	5	39			

8h	27′	20″	Macula in horario.		
	32	30	St. ζ ♊ in h. auſtral.		
	———		maculâ	14′	4″
	5	10			
8	34	34	Macula in horario.		
	39	30	St. ζ ♊ in h. auſtral.		
	———		maculâ	13′	43″
	4	56			
8	41	26	Macula in horario.		
	46	6	St. ζ ♊ in h. auſtral.		
	———		maculâ	13′	35″
	4	40			
8	48	11	Macula in horario.		
	52	36½	St. ζ ♊ in h. auſtral.		
	———		maculâ	13′	21″.
	4	25½			

8h	54′	27½″	Macula in horario.
	58	58	St. ζ ♊ in h. auſtral.
——			maculâ 13′ 8″
	4	30½	
9	5	32	Macula in horario.
	9	19	St. ζ ♊ in h. auſtral.
——			maculâ 12′ 46″
	3	47	
9	11	47	Macula in horario.
	15	22	St. ζ ♊ in h. auſtral.
——			maculâ 12′ 38″
	3	35	
9	22	57	Macula in horario.
	26	7	St. ζ ♊ in h. auſtral.
——			maculâ 12′ 11″
	3	10	
9	29	34	Macula in horario.
	32	31	St. ζ ♊ in h. auſtral.
——			maculâ 11′ 57″
	2	57	
9	34	24	Macula in horario.
	37	11	St. ζ ♊ in h. auſtral.
——			maculâ 11′ 47″
	2	47	
9	40	27	Macula in horario.
	43	2	St. ζ ♊ in h. auſtral.
——			maculâ 11′ 28″
	2	35	

9h	44′	59″	Macula in horario.
	47	26	St. ζ ♊ in h. auſtr.
——			maculâ 11′ 16″
	2	27	
9	49	30	Macula in horario.
	51	47½	St. ζ ♊ in h. auſtr.
——			maculâ 11′ 6″
	2	17½	
9	55	50	Macula in horario.
	57	55	St. ζ ♊ in h. auſtr.
——			maculâ 10′ 53″
	2	5	
9	59	36	Macula in horario.
10	1	32	St. ζ ♊ in h. auſtr.
——			maculâ 10′ 42″
	1	56	
10	6	6	Macula in horario.
	7	49	St. ζ ♊ in h. auſtr.
——			maculâ 10′ 21″
	1	43	
10	10	21	Macula in horario.
	11	57	St. ζ ♊ in h. auſtr.
——			maculâ 10′ 5″
	1	36	
10	14	28	Macula in horario.
	15	57	St. ζ ♊ in h. auſtr.
——			maculâ 10′ 5″ d.
	1	29	

10ʰ 23′ 34″ Macula in horario.
24 45 St. ζ ♊ in h. auſtr.
——— maculâ 9′ 26″
1 11
10 33 57 Macula in horario.
34 47½ St. ζ ♊ in h. auſtr.
——— maculâ 8′ 57″
0 50½

10ʰ 38′ 19″ Macula in horario.
39 2½ St. ζ ♊ in h. auſtr.
——— maculâ 8′ 42″.
0 43½

10 52 19 Immerſio ſtellæ ζ poſt limbum lucidum ☾æ e regione Grimaldi bene viſa teleſcopio 14 pedum. Tum teleſcopio 8 pedum capta Diam. ☾æ 32′ 55″. Mora in horario 2′ 24″ penduli.
Macula occidentalior limbo ortivo ☾æ 0′ 18″; vel potius 0′ 17½″, & auſtralior limbo boreo 11′ 9″, & borealior auſtrino 21′ 52″.
Igitur alia via Diam. ☾æ 33′ 1″ poſt med. noct.

Dec. 15 mane
0ʰ 10′ 54″ Emerſio ſtellæ ζ de ſub limbo obſcuro ☾æ e regione ſupra mare Criſium, bene viſa teleſcopio 8′ pedum, niſi quod fortaſſe 3″ aut 4″ tardius. Tum vero

0ʰ 18′ 50″ St. ζ in horario.
21 8 Mac. in h. borealior
——— ſtellâ 1′ 38″ dub.
2 28
0 31 45 St. ζ in horario.
34 26 Mac. in h. borealior
——— ſtellâ 0′ 18″ dub.
2 41

0ʰ 43′ 45″ St. ζ in horario.
46 46 Mac. in h. borealior
——— ſtellâ 1′ 1″
3 1
0 55 5 St. ζ in horario.
58 27 Mac. in h. borealior
——— ſtellâ 2′ 1″.
3 22

1^h 18′	2″	St. ζ in horario.	
22	1	Mac. in h. borealior	
———		ſtellâ	4′ 22″
3	59	tum tubo 6 ped.	
5 44	9	St. ζ in horario.	
56	26	Mac. in h. borealior	
———		ſtellâ	44′ 23″
12	17		
6 0	35	St. ζ in horario.	
13	15	Mac. in h. borealior	
———		ſtellâ	47′ 30″
12	50		

6^h 18′	2″	St. ζ in horario.	
31	36	Mac. in h. borealior	
———		ſtellâ	50′ 30″
13	34		
6 34	14	St. ζ in horario.	
48	27	Mac. in h. borealior	
———		ſtellâ	53′ 33″
14	13		
6 50	45	St. ζ in horario.	
7 5	36	Mac. in h. borealior	
———		ſtellâ	56′ 40″.
14	51		

Anno 1751.

Jan. 3 veſpere ☾^{a} ad ſtellam λ in ventre Piſcis, quæ in Zod. ſtell. Flamſt. ponitur in ♓ 22° 16′ cum latitudine borea 3° 24′, ad annum illum 1690.

5^h 37′	1″	Macula in horario.	
43	31	St. λ in h. auſtralior	
———		maculâ	46′ 2″
6	30		
5 45	31	Macula in horario.	
51	41	St. λ in h. auſtralior	
———		maculâ	48′ 1″
6.10			

5^h 53′	38″	Macula in horario.	
59	35	St. λ in h. auſtralior	
———		maculâ	49′ 59″
5	57		
6 1	56	Macula in horario.	
7	41	St. λ in h. auſtralior	
———		maculâ	51′ 57″.
5.45			

Hic capta Diam. ☾^{a} 32′ 27″; ☾^{a} alt. 42° 0′. Mora ☾^{a} in horario 2′ 12½″. Macula orientalior limbo occ. 0′ 40″ pend. & borealior auſtrino 11′ 31″ circuli.

Poſtea comparata eadem macula cum ſtellula alia borealiore, quæ ibidem ponitur in ♓ 23° 54′, cum latitudine boreal. 4° 33″.

7^h 16′ 57″	Macula in horario.		
25 7	St. λ in h. borealior	maculâ	32′ 59″
8 10			
7 58 3	Macula in horario.		
8 5 8	St. λ in h. borealior	maculâ	23′ 52″
7 5			

8^h 11′ 29″	Macula in horario.		
18 12	St. λ in h. borealior	maculâ	20′ 48″
6 43			
8 23 13	Macula in horario.		
29 36	St. λ in h. borealior	maculâ	18′ 11″.
6 23			

Jan. 7 veſpere tranſivit ☾ª inter 3 ſtellas τ, quæ ſunt in extrema cauda Arietis, & primam quidem earum texit. ☾ª tamen comparabatur cum ſecunda, utpote majuſcula, contra quam in Zod. ſtell. Flamſt.
Primum capta Diam. ☾ª 33′ 13″; ☾ª alt. 51°. Mora ejus in hor. 2′ 23½″ penduli.

5^h 31′ 46″	Macula in horario.		
34 47	St. τ in h. auſtralior	maculâ	6′ 58″
3 1			
5 41 41	Macula in horario.		
44 25	St. τ in h. auſtralior	maculâ	8′ 40″
2 44			

5^h 47′ 43″	Macula in horario.		
50 16	St. τ in h. auſtralior	maculâ	9′ 29″
2 33			
6 2 0	Macula in horario.		
4 8	St. τ in h. auſtralior	maculâ	11′ 52″.
2 8			

6^h

6^h	15′	54″	Macula in horario.
	17	38	St. τ in h. auſtralior
———			maculâ 13′ 43″
	1	44	

Hic ſtella illa prima videri deſiit, immerſa 6^h 15′ inter & 16′ incertum, quo præciſe ſecundo temporis. Tum autem

6^h	26′	1″	Macula in horario.
	27	29	St. τ in h. auſtralior
———			maculâ 15′ 6″.
	1	28	

Macula orientalior limbo occiduo ☾ 1′ 30½″ pend., & borealior auſtrino 21′ 58″ circuli.

Jan. 8 veſpere cum ☾ occultatura eſſet ſtellam υ in Tauro cum parvula ſocia, comparata ante eſt cum ſtella υ, ſcilicet quæ eſt inter oculum & aurem ſiniſtram Tauri. Teleſcopio 8 pedum
Diam. ☾ 33′ 11″; ☾ alt. 38°. Mora in hor. 2′ 28″ penduli.

5^h	16′	36″	Macula in horario.
	21	12	St. υ in h. borealior
———			maculâ 5′ 21″
	4	36	
5	24	26	Macula in horario.
	28	46	St. υ in h. borealior
———			maculâ 4′ 19″
	4	20	
5	38	34	Macula in horario.
	42	25	St. υ in h. borealior
———			maculâ 3′ 33″
	3	51	

5^h	46′	15″	Macula in horario.
	49	51	St. υ in h. borealior
———			maculâ 1′ 46″
	3	36	
5	52	11	Macula in horario.
	55	35	St. υ in h. borealior
———			maculâ 1′ 4″
	3	24	
5	59	17	Macula in horario.
6	2	28	St. υ in h. borealior
———			maculâ 0′ 16″.
	3	11	

6ʰ 4' 50'' Macula in horario.
7 49 St. υ jam auſtralior
——— maculà 0' 31''
2 59
6 14 48 Macula in horario.
17 29 St. υ auſtral. maculà
——— 1' 45''
2 41
6 23 25 Macula in horario.
25 48 St. υ auſtral. maculà
——— 2' 23''
2 23
6 31 39 Macula in horario.
33 49 St. υ auſtral. maculà
——— 3' 26''
2 10
6 39 9 Macula in horario.
41 3 St. υ auſtral. maculà
——— 4' 6''
1 54
6 49 46 Macula in horario.
51 20 St. υ auſtral. maculà
——— 5' 15''
1 34
6 57 16 Macula in horario.
58 36 St. υ auſtral. maculà
——— 5' 57''
1 20

7ʰ 26'' 42'' Immerſit ſtella υ bene viſa teleſcopio 8 pedum.
8ʰ 1' 48'' Immerſit ſtellula ſocia item bene viſa teleſcopio 14 ped. Porro ſtellula hæc eſt orientalior ſtella υ 1' 0'' penduli præciſe eàdemque auſtralior 11' 15'' circuli. Macula orientalior limbo occ. ☾ 1' 56½'', & borealior auſtrino 21' 31''. Emerſio nulla viſa.
9 11 41 St. υ in horario.
14 22 Mac. in h. borealior
——— ſtellà υ 15' 59''
2 41
27 32 St. τ ♉ in h. boreal.
——— ſtellà υ 13' 53''
15 51
9 34 30 St. υ in horario.
37 52 Mac. in h. borealior
——— ſtellà υ 16' 52''.
3 22

	50′	22″	St. τ ♉ in h. boreal.
	———		ſtellâ υ 13′ 53″
	15	52	
10h	1′	39″	St. υ in horario.
	5	49	Mac. in h. boreal.
	———		ſtellâ 18′ 10″
	4	10	
10	32	0	St. υ in horario.
	37	7	Mac. in h. boreal.
	———		ſtellâ 18′ 53″
	5	7	
10	56	39	St. υ in horario.
11	2	31	Mac. in h. boreal.
	———		ſtellâ 19′ 20″
	5	52	
	12	29	St. τ ♉ in h. bor.
	———		ſtellâ υ 14′ 5″
	15	50	
11	16	3	St. υ in horario.
	22	33	Mac. in h. boreal.
	———		ſtellâ 19′ 18″
	6	30	
	31	53	St. τ ♉ in h. bor.
	———		ſtellâ υ 13′ 55″
	15	50	& poſt mediam noctem.

Jan. 9 mane

0h	1′	18″	St. υ in horario.
	9	21½	Mac. in h. borealior
	———		ſtellâ 19′ 12″
	8	3½	
	17	10	St. τ ♉ in h. boreal.
	———		ſtellâ υ 13′ 53″
	15	52	
0	21	27	St. υ in horario.
	30	13	Mac. in h. borealior
	———		ſtellâ 18′ 58″
	8	46	
	37	20	St. τ ♉ in h. boreal.
	———		ſtellâ υ 13′ 56″
	15	53	
0	40	58	St. υ in horario.
	50	25	Mac. in h. borealior
	———		ſtellâ 18′ 42″
	9	27	
	56	49	St. τ ♉ in h. boreal.
	———		ſtellâ υ 13′ 54″
	15	51	
1	6	26	St. υ in horario.
	16	50	Mac. in h. borealior
	———		ſtellâ 18′ 10″
	10	24	
	22	18	St. τ ♉ in h. boreal.
	———		ſtellâ 13′ 55″.
	15	52	

$2^h\ 52'\ 42''$ Macula in horario.
54 48 St. τ in h. auſtralior
——— maculâ 1′ 24″
2 6
2 58 9 Macula in horario.
59 34 St. τ in h. auſtralior
——— maculâ 1′ 15″
1 25

$3^h\ 2'\ 58''$ Macula in horario.
3 59 St. τ in h. auſtralior
——— maculâ 1′ 7″.
1 1

Jan. 9 veſpere ☾ª cum ſtella *H* ♊ ſeu Propode, prope nodum ☋.
$5^h\ 20'\ 25''$ Macula in horario.
59 42 Stella *H* ♊ in hor. borealior maculâ 18′ 59″.
———
39 17
Et capta Diam. ☾ª 32′ 57″; ☾ª alt. 41°. Mora in horario 2′ 27½″ penduli. Macula orientalior limbo occiduo ☾ª 2′ 2″ pend. & borealior auſtrino 25′ 34″.

7 12 12 Macula in horario.
47 35 St. *H* ♊ in h. boreal.
——— maculâ 12′ 17″
35 23
7 51 19 Macula in horario.
8 25 28 St. *H* ♊ in h. boreal.
——— maculâ 10′ 59″;
34 9 tum poſt med. noct.
Jan. 10 mane
3 27 9 Macula in horario.
46 36 St. *H* ♊ in h. boreal.
——— maculâ 30′ 42″
19 27

$3^h\ 49'\ 18''$ Macula in horario.
4 7 52 St. *H* ♊ in h. boreal.
——— maculâ 33′ 5″
18 34
4 11 47 Macula in horario.
29 23 St. *H* ♊ in h. boreal.
——— maculâ 35′ 13″
17 36
4 35 50 Macula in horario.
52 26 St. *H* ♊ in h. boreal.
——— maculâ 37′ 24″ d.
16 36

Jan. 13 veſpere ☾ᵃ cum ſtella ο ♌.

9ʰ 18′ 50″ Macula in horario.	9ʰ 40′ 1″ Macula in horario.
37 24 St. ο ♌ in h. auſtral.	57 53 St. ο ♌ in h. auſtral.
——— maculâ 46′ 31″	——— maculâ 43′ 29″.
18 34	17 52

10 0 0 Capta Diam. ☾ᵃ 31′ 48″; ☾ᵃ alt. 38°. Mora in hor. 2′ 13″ penduli. Macula occidentalior limbo ortivo 0′ 13″ penduli, & borealior limbo auſtrino 17′ 39″ circuli.

10 16 52 Macula in horario.	11ʰ 21′ 8″ Macula in horario.
33 46 St. ο ♌ in h. auſtral.	36 24 St. ο ♌ in h. auſtral.
——— maculâ 37′ 6″	——— maculâ 26′ 37″
16 54	15 16
10 38 32 Macula in horario.	11 37 57 Macula in horario.
54 51 St. ο ♌ in h. auſtral.	52 47 St. ο ♌ in h. auſtral.
——— maculâ 33′ 56″	——— maculâ 23′ 51″.
16 19	14 50

Febr. 3 veſpere tranſivit ☾ᵃ ad boream ſtellæ δ in cauda Arietis. captæ ſolum aliquæ differentiæ, quod aliud commode fieri non poſſet; nempe

8ʰ 46′ 55″	Stella δ diſt. a limbo lucido remotiore ☾ᵃ	1°	1′ 36″
51 59	— — — —	1	0 46
9 0 33	— — — —		59 33
14 54	— — — —		58 8
19 2	St. δ diſt. a limbo viciniore ☾ᵃ		19 1
36 51	Capta Diam. ☾ᵃ 32′ 50″; ☾ᵃ alta 37½°.		
42 0	Stella δ diſt. a limbo viciniore ☾ᵃ		25 26
49 19	— — — —		26 7.

10^{h} 18′ 25″	Stella δ diſt. a limbo viciniore ☾^{a}				31′	3′.
42 1	—	—	—	—	37	55
53 23	—	—	—	—	42	1
11 8 51	—	—	—	—	48	6.

Febr. 4 veſpere ☾^{a} cum ſtella *A* in Tauro, & primum capta Diam. ☾^{a} 32′ 59″; ☾^{a} alt. 64½°. Mora in hor. 2′ 26″.

6^{h} 1′ 54″ St. *A* in horario.
2 45 Mac. in h. borealior ſtellà 25′ 24″
0 51

6^{h} 5′ 12″ St. *A* in horario.
6 9½ Mac. in h. borealior ſtellà 25′ 43″.
0 57½

6 10 43 St. *A* in hor. in eodem parallelo cum limbo auſtrino ☾^{a}
11 51 Mac. in hor. borealior ſtellà 26′ 6″, & tantundem macula erat borealior limbo auſtrino ☾^{a}, & erat eadem orientalior limbo occiduo 1′ 3½″ pend.
1 8

6 18 26 St. *A* in hor.
19 47 Mac. in hor. borealior ſtellà 26′ 39″.
1 21

9 18 45 St. *A* in horario.
24 22 Limb. ☾^{a} occ. in hor. & auſtrin. auſtral. ſtellà 10′ 46′
5 37

9 28 20 St. *A* in horario.
34 15 Limb. ☾^{a} occ. in hor. & auſtrin. auſtral. ſtellà 10 57.
5 55

$9^h\ 37'$	$19''$	Stella in horario.	
43	32	Limb. ☾æ occ. in h. & auſtrin. auſtral. ſtellâ	$11'\ 16''$
6	13		
9 48	16	Stella in horario.	
54	52	Limb. ☾æ occ. in h. & auſtrin. auſtral. ſtellâ	11 21
6	36		
10 1	15	Stella in horario.	
8	18	Limb. ☾æ occ. in h. & auſtrin. auſtral. ſtellâ	11 29.
7	3		

Febr. 6 veſpere ☾æ ad ſtellam ν ♊, quam texit, & primum capta Diam. ☾æ $32'\ 27''$. ☾æ tum alta $46\frac{1}{2}°$. Mora ☾æ in hor. $2'\ 25''$ penduli.

$5^h\ 30'$	$13'$	Macula in horario.	
37	25	St. ν ♊ in h. boreal.	
		maculâ	$4'\ 56''$
7	12		
5 40	35	Macula in horario.	
47	26	St. ν ♊ in h. boreal.	
		maculâ	$4'\ 46''$
6	51		
5 48	47	Macula in horario.	
55	$24\frac{1}{2}$	St. ν ♊ in h. boreal.	
		maculâ	$4'\ 46''$
6	$37\frac{1}{2}$		

$5^h\ 57'$	$38''$	Macula in horario.	
6 3	59	St. ν ♊ in h. boreal.	
		maculâ	$4'\ 33''$
6	21		
6 5	54	Macula in horario.	
12	0	St. ν ♊ in h. boreal.	
		maculâ	$4'\ 33''$.
6	6		

Hic determinata macula orientalior limbo occiduo ☾æ $1'\ 40''$ penduli, & borealior limbo auſtrino $18'\ 39''$, & auſtralior limbo boreo $13'\ 56''$ unde alia via Diam. ☾æ $32'\ 35''$.

7h	49′	27″	Macula in horario.
	52	32	St. η ♊ in h. boreal.
———			maculâ 6′ 20″
	3	5	
7	57	43	Macula in horario.
8	0	34	St. η ♊ in h. boreal.
———			maculâ 6′ 28″
	2	51	
8	8	50	Macula in horario.
	11	23	St. η ♊ in h. boreal.
———			maculâ 6′ 57″
	2	33	
8	26	9	Macula in horario.
	28	12	St. η ♊ in h. boreal.
———			maculâ 7″ 48″
	2	3	
8	32	24	Macula in horario.
	34	19	St. η ♊ in h. boreal.
———			maculâ 8′ 12″
	1	55	
8	40	54	Macula in horario.
	42	35	St. η ♊ in h. boreal.
———			maculâ 8′ 49″ d
	1	41	
8	49	53	Macula in horario.
	51	19	St. η ♊ in h. boreal.
———			maculâ 8′ 49″ tuta.
	1	26	

8h	55′	33″	Macula in horario.
	56	49	St. η ♊ in h. boreal.
———			maculâ 9′ 13″
	1	16	
9	37	17	Immerſit ſtella η prope cornu boreum. Emerſio viſa non eſt. Tum vero elapſa jam media nocte.

Febr. 7 mane

0h	29′	33″	St. η in horario.
	33	10½	Limb. occ. in h.
	34	50	Mac. in h. auſtralior
———			ſtellâ 29′ 1″
	5	17	
1	37	20	St. η in horario.
	43	26	Limb. occ. in h.
	45	6	Mac. in h. auſtralior
———			ſtellâ 37′ 48″
	7	46	
1	47	3	St. η in horario.
	53	35	Limb. occ. in h.
	55	15	Mac. in h. auſtralior
———			ſtellâ 39′ 4″
	8	12	
1	57	25	St. η in horario.
2	4	19	Limb. occ. in h.
	5	49	Mac. in h. auſtralior
———			ſtellâ vacat.
	8	24	

2h

7′	10″	St. ν in horario.
14	30	Limb. occ. in h.
16	9	Mac. in h. auſtralior
———		ſtellâ 41′ 54″
8	59	
18	43	St. ν in horario.
26	30	Limb. occ. in h.
	45	St. μ ♊ in hor.
28	10	Mac. in h. auſtralior
———		ſtellâ 43′ 23″
9	27	

2ʰ 30′	32″	St. ν in horario.
38	34	St. μ ♊ in hor.
	48	Limb. occ. in h.
40	28	Mac. in h. auſtralior
———		ſtellâ 45′ 1″.
9	56	

Nota, temporum momentis ſingulis auferenda 45″ pend. ut fiant vera & correcta.

Comparatæ hac occaſione inter ſe ſtellæ *H* & ν ♊ ſic:

22	30	Stella *H* in horario.
33	21	Stella ν in h. auſtralior quam *H* 41′ 58″.

ebr. 7 veſpere ☾ᵃ cum ſtella ζ ♊, quam etiam obtexerat, ſed die claro. Poſt occaſum Solis capta Diam. ☾ᵃ 32′ 21″; ☾ᵃ tum alta 33°. Mora in horario 2′ 21½″. Macula fuit Ariſtarchus orientalior limbo occiduo ☾ᵃ 2′ 5″ penduli, & auſtralior boreo 11′ 7″, & borealior auſtrino 21′ 12″. Igitur alia via Diam. ☾ᵃ 32′ 19″.

ʰ 35′	22″	St. ζ in horario.
36	38	Limb. ☾ᵃ occ. in h.
38	42	Mac. in h. auſtralior
———		ſtellâ 6′ 47″
3	20	

5ʰ 40′	21″	St. ζ in horario.
41	49	Limb. ☾ᵃ occ. in h.
43	52	Mac. in h. auſtralior
———		ſtellâ 6′ 47″.
3	31	

5^h	48′	5″	St. ♃ in horario.
	49	48½	Limb. ☾* occ. in h.
	51	52	Mac. in h. auſtralior
———			ſtellâ 7′ 19″
	3	47	
5	56	8	St. ♃ in horario.
6	0	10	Limb. ☾* occ. in h.
			Mac. in h. auſtralior
———			ſtellâ vacat.
	4	2	
6	1	50	St. ♃ in horario.
	3	59	Limb. ☾* occ. in h.
	6	4	Mac. in h. auſtralior
———			ſtellâ 8′ 2″
	4	14	
6	7	35	St. ♃ in horario.
	9	56	Limb. ☾* occ. in h.
	11	59	Mac. in h. auſtralior
———			ſtellâ 8′ 13″
	4	24	
6	13	45	St. ♃ in horario.
	16	18	Limb. ☾* occ. in h.
	18	22	Mac. in h. auſtralior
———			ſtellâ 8′ 30″
	4	37	
6	20	14	St. ♃ in horario.
	22	59½	Limb. ☾* occ. in h.
	25	3½	Mac. in h. auſtralior
———			ſtellâ 8′ 51″
	4	49½	

6^h	42′	54″	St. ♃ in horario.
	46	21	Limb. ☾* occ. in h.
	48	24	Mac. in h. auſtralior
———			ſtellâ 10′ 2″
	5	30	
6	51	10½	St. ♃ in horario.
	54	52	Limb. ☾* occ. in h.
	56	56	Mac. in h. auſtralior
———			ſtellâ 10′ 38″
	5	45	
6	58	22	St. ♃ in horario.
7	2	16	Limb. ☾* occ. in h.
	4	20	Mac. in h. auſtralior
———			ſtellâ 11′ 6″
	5	58	
7	8	32	St. ♃ in horario.
	12	46	Limb. ☾* occ. in h.
	14	50	Mac. in h. auſtralior
———			ſtellâ 11′ 42″
	6	18	
7	22	9½	St. ♃ in h. auſtralior
	26	45	Limb. ☾* occ. in h.
	28	49	Mac. in h. auſtralior
———			ſtellâ 12′ 36″
	6	39	
7	31	22	St. ♃ in horario.
	36	14	Limb. ☾* occ. in h.
	38	18	Mac. in h. auſtralior
———			ſtellâ 13′ 23″.
	6	56	

7h 46′ 21″	Stella ζ in horario.	
51 41	Limb. ☾ᵃ occ. in hor.	
53 44½	Mac. in hor. auſtralior ſtellâ	14′ 24″.
7 23½		

Febr. 9 veſpere ☾ᵃ ad ſtellam α ♋.

8h 48′ 35″	St. α in horario.	
52 30	Mac. in h. borealior ſtellâ	45′ 37″
3 55		
8 54 10	St. α in horario.	
56 16	Limb. occ. in h.	
58 15	Mac. in h. borealior ſtellâ	44′ 46″
4 5		
9 10 22	St. α in horario.	
12 51	Limb. occ. in h.	
14 50	Mac. in h. borealior ſtellâ	42′ 11″
4 28		
9h 17′ 53½″	St. α in horario.	
20 34	Limb. occ. in h.	
22 34	Mac. in h. borealior ſtellâ	40′ 55″
4 40½		
9 25 28	St. α in horario.	
28 19	Limb. occ. in h.	
30 18	Mac. in h. borealior ſtellâ	39′ 53″
4 50		
9 32 25	St. α in horario.	
35 28½	Limb. occ. in h.	
37 26½	Mac. in h. borealior ſtellâ	38′ 31″.
5 1½		

Igitur Macula orientalior limbo occiduo ☾ᵃ 1′ 59″ penduli, eademque auſtralior boreo 13′ 47″ circuli. Diam. ☾ᵃ 31′ 59″; ☾ᵃ alta 58°. Mora in hor. 2′ 14″.

9h 55′ 29″	St. α in horario.	
59 5½	Limb. occ. in h.	
10 1 4½	Mac. in h. boreal. ſtellâ	34′ 52″
5 35½		
10 3 43	St. α in horario.	
7 32	Limb. occ. in h.	
9 31	Mac. in h. boreal. ſtellâ	33′ 9″.
5 48		

10^h	12′	54″	St. α in horario.
	16	56	Limb. occ. in hor.
	18	55	Mac. in hor. borealior ſtellâ 31′ 42″.
	6	1	

Febr. 20 mane vidi juxta ☾^em ſtellulam, quæ in Zod. ſtell. Flamſt. ponitur ſupra plantam pedis ſiniſtri Ophiuchi in ♐ 16° 9′ cum lat. auſtr. 1° 10′ nempe ad annum 1690. Cum hac & ſequentibus duabus *B* & *C* comparata ☾^a, ut non optimo, ita nec nullo ſucceſſu.

4^h	38′	13″	Stellula in horario.
	39	49	Cornu auſtr. ☾^a in h.
	40	4	Cornu bor. ☾^a in h.
		59	Mac. in h. borealior ſtellâ 16′ 41″
	41	17	Limb. ☾^a ortiv. in h.
	46	32	St. *B* in h. bor. ſtellâ prima 3′ 59″
	51	34	St. *C* in h. bor. ead. ſtel. primâ 14′ 26″
5	42	55	Sellula in horario.
	46	12	Cornu auſtr. ☾^a in h.
		25	Cornu bor. ☾^a in h.
	47	5	Mac. in h. borealior ſtellâ 14′ 22″
		28	Limb. ☾^a ort. in h. St. *B* in h. bor. ſtellâ prima 4′ 10″
5^h	56′	19″	St. *C* in h. bor. ead. ſtel. primâ 14′ 38″
5	59	38	Stellula in horario.
6	3	18	Cornu auſtr. ☾^a in h.
		32	Cornu bor. ☾^a in h.
	4	11	Mac. in h. borealior ſtellâ 13′ 56″.
		34	Limb. ☾^a ort. in h. St. *B* in h. bor. ſtellâ prima 4′ 10″.
	12	59	St. *C* in h. bor. ead. ſtel. primâ 14′ 36″.

Diam. ☾^a 30′ 18″; ☾^a tum alta 26½°. Mora ☾^a in hor. 2′ 16″. Macula borealior limbo auſtrino ☾^a 20′ 0″. Ut autem in ternis hiſce Operationibus non optime omnia concordent, pluribus viis facile erit eruere tempus ☾^a centri in hor.

Mart. 6 veſpere ☾ª ad ſtellam ζ ♊.

10ʰ 12′ 59″	Macula in horario.	
17 49	St. ζ in h. boreal.	
———	maculâ	10′ 31″
4 50		
10 23 18	Macula in horario.	
27 51	St. ζ in h. boreal.	
———	maculâ	11′ 49″
4 33		

auſtralior boreo 13′ 20″ circuli;

10ʰ 31′ 12″	Macula in horario.	
35 31	St. ζ in h. boreal.	
———	maculâ	12′ 50″.
4 19		

Diam. ☾ª 32′ 9″; ejus mora in h. 2′ 21″; ☾ª tum alta 47°. Macula orientalior limbo occiduo ☾ª 1′ 30″ penduli, & neque plus per nubes licuit.

Mart. 9 veſpere comparata ☾ª cum ſtella ω in extremitate pedis dextri ♌, & primum capta Diam. ☾ª 31′ 23″. Mora in hor. 2′ 11″ pend. ☾ª alta 29°.

6ʰ 32′ 14″	St. ω in horario.	
35 41	L. ☾ª occ. in h. &	
———	boreus boreal. ſtellâ	
3 27		50′ 24″
6 42 5	St. ω in horario.	
45 47	L. ☾ª occ. in h. &	
———	boreus boreal. ſtellâ	
3 42		48′ 41″

6ʰ 51′ 47″	St. ω in horario.	
55 45	L. ☾ª occ. in h. &	
———	boreus boreal. ſtellâ	
3 58		47′ 13″.

Mart. 18 mane ☾ª cum ſtella δ ♏.

2ʰ 2′ 12″	St. δ in horario.	
7 52	L. ☾ª ort. in hor. &	
———	auſtrin. auſtral. ſtellâ	
5 40		37′ 38″

2ʰ 13′ 16″	St. δ in horario.	
19 13½	L. ☾ª ort. in hor. &	
———	auſtrin. auſtral. ſtellâ	
5 57½		38′ 33″.

2^h	22′	8″	St. δ in horario.
	28	17	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	9	39′ 30″
2	29	43	St. δ in horario.
	36	4	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	21	40′ 17″
2	37	36	St. δ in horario.
	44	6	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	30	40′ 55″
2	46	30	St. δ in horario.
	53	14	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	44	42′ 2″
2	55	57	St. δ in horario.
3	2	55	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	58	42′ 26″
3	4	15	St. δ in horario.
	11	24	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	7	9	43′ 20″

3^h	13′	34″	St. δ in horario.
	20	56	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	7	22	43′ 54″
3	22	31	St. δ in horario.
	30	7	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	7	36	44′ 44″
3	32	14	St. δ in horario.
	40	2	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	7	48	45′ 28″
3	41	59	St. δ in horario.
	49	59	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	8	0	46′ 12″
3	51	44	St. δ in horario.
	59	58	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	8	14	46′ 48″
4	1	17	St. δ in horario.
	9	45	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	8	28	47′ 24″.

Hic capta Diam. ☾^{a} 30′ 15″; ☾^{a} tum alta 27°. Mora in hor. 2′ 13″.

5^h	40′	47″	St. δ in horario.
	51	33	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	10	46	51′ 50″

5^h	54′	1″	St. δ in horario.
6	5	21	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	11	20	52′ 11″.

Mart. 19 mane comparata ☾ª cum duabus ſtellis *B* & *C*, quæ ſunt in articulo tali ſiniſtri Ophiuchi.

2^h 54′ 17″	Macula in horario.	4^h 5′ 43″	Macula in horario.
55 20	L. ☾ª ort. in hor.	7 6	L. ☾ª ort. in hor.
3 22 31	St. *B* in h. auſtralior maculâ 25′ 9″	32 16	St. *B* in h. auſtralior maculâ 21′ 50″
27 34	St. *C* in h. auſtralior maculâ 14′ 31″	37 19	St. *C* in h. auſtralior maculâ 11′ 8″
3 30 28	Macula in horario.	4 42 47	Macula in horario.
31 41	L. ☾ª ort. in hor.	44 9	L. ☾ª ort. in hor.
57 48	St. *B* in h. auſtralior maculâ 23′ 9″	5 8 27	St. *B* in h. auſtralior maculâ 20′ 40″
4 2 51	St. *C* in h. auſtralior maculâ 12′ 40″	13 30	St. *C* in h. auſtralior maculâ 10′ 7″.

Macula borealior limbo auſtr. ☾ª 7′ 36″. Diam. ☾ª 30′ 22″. Mora in hor. 2′ 15″; ☾ª alta 26½°.

April. 2 veſpere comparata ☾ª cum ſtella ζ ♊.

8^h 18′ 30″	Macula in horario.	9 12 42	Macula in horario.
42 36	St. ζ in h. auſtralior	35 8	St. ζ in h. auſtralior
———	maculâ 13′ 12″	———	maculâ 6′ 16″
24 6		22 26	
8 45 29	Macula in horario.	9 37 32	Macula in horario.
9 8 46	St. ζ in h. auſtralior	59 9	St. ζ in h. auſtralior
———	maculâ 9′ 50″	———	maculâ 2′ 48″.
23 17		21 37	

Hic capta Diam. ☾ª 32′ 32″. Mora in h. 2′ 22″; ☾ª alta 32°. Macula orientalior limbo occiduo ☾ª 0′ 50″ penduli, & auſtralior limbo boreo 12′ 38″ circuli.

10^h	18′	18″	Macula in horario.	11^h	10′	59″	Macula in horario.
	38	29	St. ζ in h. boreal.		29	13	St. ζ in h. boreal.
	———		maculâ 2′ 56″		———		maculâ 10′ 34″
	20	11			18	14	
10	41	31	Macula in horario.	11	32	45	Macula in horario.
11	0	53	St. ζ in h. boreal.		50	8	St. ζ in h. boreal.
	———		maculâ 6′ 39″		———		maculâ 13′ 45″.
	19	22			17	23	

April. 27 ☾^{am} cum ♀ & ſtella *A* ♉ vide in Congreſſibus Planetarum.

Maji. 2 veſpere ☾^{a} cum ſtella *x* ♋.

8^h	30′	0″	Proxime, ſtella *x* in linea cornuum ☾^{a}, diſtans a cornu boreo remotiore 46′ 0″. Tum
8	40	44	Stella *x* in horario.
	41	18	Cornu auſtrin. in horario.
		54	Cornu boreum in horario & limbus boreus ☾^{a} borealior ſtellâ — — 43′ 29″
8	46	41	Stella *x* in horario.
	47	24	Cornu auſtrin. in horario.
	48	0	Cornu boreum in horario & limbus boreus ☾^{a} borealior ſtellâ — — 42 24
8	52	34	Stella *x* in horario.
	53	26	Cornu auſtrin. in horario.
	54	1	Cornu boreum in horario & limbus boreus ☾^{a} borealior ſtellâ — — 41 6.

8^h

8^h	$57'$	$13''$	Stella $\varkappa$ in horario.	
	58	12	Cornu auſtrin. in horario.	
		47	Cornu boreum in horario & limbus boreus ☾^{ae} borealior ſtellâ — —	$40'$ $19''$
9	7	44	Stella $\varkappa$ in horario.	
	8	58	Cornu auſtrin. in horario.	
	9	34½	Cornu boreum in horario & limbus boreus ☾^{ae} borealior ſtellâ — —	37 55
9	13	36	Stella $\varkappa$ in horario.	
	14	59	Cornu auſtrin. in horario.	
	15	36	Cornu boreum in horario & limbus boreus ☾^{ae} borealior ſtellâ — —	36 45.

Hic capta Diam. ☾^{ae} $31'$ $33''$; ☾^{a} alta 40°. Nec plus per nubes licuit.

Maji. 13 mane comparata ☾^{a} cum duabus ſtellis *B* & *C*, quæ ſunt in talo Ophiuchi.

1^h	$20'$	$44''$	Macula in horario.	
	28	43	St. *B* in hor. auſtralior maculâ	$45'$ $51''$
	7	59		
1	31	23	Macula in horario.	
	39	11	St. *B* } auſtraliores maculâ — —	45 29
	44	12	St. *C* }	35 1
1	46	6	Macula in horario.	
	53	31	St. *B* } auſtraliores maculâ — —	45 42
	58	34	St. *C* }	34 58.
			Poſt mediam noctem	

2^h 0′ 1½″ Macula in horario.

7 6 St. *B* in h. auſtralior

——— maculà 45′ 42″

7 4½

2 28 17 Macula in horario.

39 47 St. *C* in h. auſtralior

——— maculà 35′ 7″.

11 30

Circa 2^h 15′ capta Diam. ☾^{æ} 30′ 9″. Mora in hor. 2′ 13″. Macula occidentalior limbo ort. 0′ 21″ pend. & borealior auſtrino 19′ 57″.

Maji. 14 mane poſt mediam noctem tranſibat ☾^{a} ad quandam ſtellulam, quæ in Zod. ſtell. Flamſt. ponitur in ♐ 28° 23″ cum latit. auſtr. 0° 14′; at in Catal. Britann. ejuſdem nulla eſt, quæ huc quadret, & hic Zodiacus cum Catalogo non ſatis concordat.

1^h 12′ 29″ Macula in horario.

14 14 St. in hor. auſtralior

——— maculà 45′ 1″

1 45

1 16 17 Macula in horario.

17 57 St. in hor. auſtralior

——— maculà 44′ 57″

1 40

1 20 10 Macula in horario.

21 44½ St. in hor. auſtralior

——— maculà 45′ 3″

1 34½

1 23 30 Macula in horario.

25 2 St. in hor. auſtralior

——— maculà 45′ 3″

1 32

1^h 26′ 29″ Macula in horario.

27 54 St. in hor. auſtralior

——— maculà 45′ 14″

1 25

1 29 25 Macula in horario.

30 46 St. in hor. auſtralior

——— maculà 45′ 17″

1 21

1 34 42 Macula in horario.

35 58 St. in hor. auſtralior

——— maculà 45′ 13″

1 16

1 38 38 Macula in horario.

39 48 St. in hor. auſtralior

——— maculà 45′ 34″.

1 10

1^h 43′ 34″ Macula in horario.
44 38 St. in hor. auſtralior
——— maculâ 45′ 37″.
1 4
Hic comparata iſta ſtellula cum alia, quæ in Catal. Britannico vocatur *Nebuloſa b*, & notatur illic in ♐ 25° 38′ 16″ cùm latit. auſtr. 0° 19′ 45″.
2^h 7′ 41″ Nebuloſa *b* in hor.
19 22 Macula in horario.
19 35½ Stellula in h. boreal.
——— ſtellâ *b* 2′ 38″
11 54½
2 23 24 Nebuloſa *b* in h.
35 10 Macula in horario.
35 19 Stellula in h. boreal.
——— ſtellâ *b* 2′ 38″.
11 35
Poſtea capta Diamet. ☾^{a} 29′ 54″. Mora in hor. 2′ 13″; ☾^{a} alta 27°. Macula occidentalior limbo ort. 1′ 3″ pend. & auſtralior boreo 25′ 20″ circuli.
3^h 8′ 56″ Stellula in horario.
9 55 Mac. in h. borealior
——— ſtellulâ 48′ 49″
0 59

3^h 17′ 37″ Stellula in horario.
18 47 Mac. in h. borealior
——— ſtellulâ 49′ 42″
1 10
3 28 3 Stellula in horario.
29 28 Mac. in h. borealior
——— ſtellulâ 49′ 52″
1 25
3 34 6 Stellula in horario.
35 41 Mac. in h. borealior
——— ſtellulâ 50′ 30″
1 35
3 39 39 Stellula in horario.
41 20 Mac. in h. borealior
——— ſtellulâ 50′ 32″
1 41
3 46 16 Stellula in horario.
48 7 Mac. in h. borealior
——— ſtellulâ 50′ 56″
1 51
3 49 47 Stellula in horario.
51 45 Mac. in h. borealior
——— ſtellulâ 51′ 26″
1 58
3 53 43 Stellula in horario.
55 48 Mac. in h. borealior
——— ſtellulâ 51′ 26″.
2 5

3^h 56′	31″	St. π in h. borealior ſtellâ ☿	0′ 48″
4 0	19	Stella ☿ in horario.	
9	41	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
9	22	ſtellâ ☿	vacat.
12	22	St. π in h. borealior ſtellâ ☿	0′ 59″
4 14	48	Stella ☿ in horario.	
24	30	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
9	42	ſtellâ ☿	32′ 16″
4^h 26′	46″	Stella ☿ in horario.	
36	45	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
9	59	ſtellâ ☿	34′ 40″
38	48	St. π in h. borealior ſtellâ ☿	0′ 42″
4 42	21	Stella ☿ in horario.	
52	43	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
10	22	ſtellâ ☿	36′ 37″
54	24	St. π in h. borealior ſtellâ ☿	0′ 52″.

Capta rurſum Diam. ☾æ claro jam die 30′ 29″; ☾æ tum alta 25°.

Jun. 7 veſpere comparata ☾æ cum ♂ ♏, quam ante die adhuc claro obtexerat.

8^h 4′	23″	Stella ♂ in horario.	
6	12	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
1	49	ſtellâ ♂	11′ 51″
8 8	40	Stella ♂ in horario.	
10	33½	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
1	53½	ſtellâ ♂	11′ 23″
8 12	4½	Stella ♂ in horario.	
14	4	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
1	59½	ſtellâ ♂	11′ 1″
8^h 15′	52″	Stella ♂ in horario.	
17	58	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
2	6	ſtellâ ♂	10′ 36″
8 19	19	Stella ♂ in horario.	
21	31	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
2	12	ſtellâ ♂	10′ 19″
8 24	13	Stella ☿ in horario.	
26	31	L. ☾æ ort. in hor. &	
———		limb. bor. borealior	
2	18	ſtellâ ♂	9′ 40″.

1h	37'	25"	Stella ξ in horario.
	43	24	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	5	59	ſtellâ ξ 20' 59"
1	45	9	Stella ξ in horario.
	51	18	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	6	9	ſtellâ ξ 21' 21"
1	52	50	Stella ξ in horario.
	59	11	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	6	21	ſtellâ ξ 21' 42"
2	0	28	Stella ξ in horario.
	7	0	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	6	32	ſtellâ ξ 22' 15"
2	8	56	Stella ξ in horario.
	15	41	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	6	45	ſtellâ ξ 22' 53".
2	17	35	Capta Diam. ☾æ 30' 29". Mora in h. 2' 14"; ☾æ alt. 28°.
2	35	33	Stella ξ in horario.
	42	55	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	7	22	ſtellâ ξ 24' 45"
2h	44'	40"	Stella ξ in horario.
	52	16	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	7	36	ſtellâ ξ 25' 16"
2	54	17	Stella ξ in horario.
3	2	4	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	7	47	ſtellâ ξ 26' 8"
3	3	48	Stella ξ in horario.
	11	49	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	8	1	ſtellâ ξ 26' 54"
3	13	19	Stella ξ in horario.
	21	34	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	8	15	ſtellâ ξ 27' 45"
3	23	38	Stella ξ in horario.
	32	8	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	8	30	ſtellâ ξ 28' 36"
3	34	15	Stella ξ in horario.
	42	59	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	8	44	ſtellâ ξ 29' 36"
3	44	28	Stella ξ in horario.
	53	27	L. ☾æ ort. in hor. &
	———	———	limb. bor. borealior
	8	59	ſtellâ ξ 30' 28".

10^h 0′ 14″ Macula in horario auſtralior ſtellâ 10 34″

10	2	16	Stella δ in horario.	10^h	10′	0″	Stella δ in horario.
	6	56	L. ☾æ ort. in h.		14	50	L. ☾æ ort. in h.
	———				———		
	4	40			4	50	
	8	50	Macula in h. auſtr. ſtellâ 10′ 16″		16	43	Macula in h. auſtr. ſtellâ 11′ 53″ d.

Nempe cum Declinatio limbi jam capi non poſſet, cepi Declinationem maculæ. Porro macula auſtralior limbo boreo 12′ 12″.

Aug. 1 veſpere comparata fuit ☾æ cum eadem ſtella δ ♏.

7^h	46′	0″	St. δ in horario.	9^h	7′	41″	St. δ in horario.
8	6	14	L. occ. ☾æ in hor. &		29	50	L. occ. ☾æ in h. &
———			boreus auſtral. ſtellâ	———			boreus auſtr. ſtellâ
	20	14	15′ 18″		22	9	17′ 26″
8	11	24	St. δ in horario.	10	3	52	St. δ in horario.
	32	12	L. occ. ☾æ in hor. &		27	31	L. occ. ☾æ in h. &
———			boreus auſtral. ſtellâ	———			boreus auſtr. ſtellâ
	20	48	16′ 6″		23	39	17′ 28″.
8	36	43	St. δ in horario.				
	58	6	L. occ. ☾æ in hor. &				
———			boreus auſtral. ſtellâ				
	21	23	16′ 51″				

Diametrum ☾æ capere neglexi. Ex Ephem. Pariſ. ea eſt in grad. 30′ 40″, in temp. 2′ 12″ 18‴ nempe horizont.

Sept. 13 mane ☾æ cum ſtell. ζ in cornu auſtrino ♉.

2^h

2h 37′ 56″ Stella ζ in horario.
55 52 L. ☾æ ortivus in hor. & bor. borealior ſtellâ 44′ 4″
———
17 56

2 58 53 St. ζ in horario.
3 17 31 L. ☾æ ort. in hor. & bor. borealior ſtellâ
———
18 31 44′ 46″

Hic capta Diam. ☾æ 32′ 57″. Mora in hor. 2′ 25″; ☾æ alta 55°.

3 32 30 St. ζ in horario.
52 14 L. ☾æ ort. in hor. & bor. borealior ſtellâ
———
19 44 45′ 25″.

4h 11′ 22″ St. ζ in horario.
32 19 L. ☾æ ort. in hor. & bor. borealior ſtellâ
———
20 57 45′ 51″.

Sept. 25 veſpere comparata ☾æ cum ſtella ω in calce pedis dextri Ophiuchi teleſcopio 3 pedum, quod teleſcopium ordinarium 6 pedum non caperet commode differentiam Declinationis.

7h 13′ 54″ St. ω in horario.
16 4 L. ☾æ occ. in hor & bor. auſtralior ſtellâ
———
2 10 59′ 14″

7 18 6 St. ω in horario.
20 25 L. ☾æ occ. in hor. & bor. auſtralior ſtellâ
———
2 19 59′ 8″

7 38 42 St. ω in horario.
41 35 L. ☾æ occ. in hor. & bor. auſtralior ſtellâ
———
2 53 58′ 43″

7 44 1 St. ω in horario.
47 9 L. ☾æ occ. in hor. & bor. auſtralior ſtellâ
———
3 8 58′ 18″.

Diam. ☾æ non eſt capta, petenda eſt ex Ephemeridibus.

Sept. 27 veſpere ☾$^{\alpha}$ ad ſtellam μ majuſculam in arcu ♐ prope colurum ſolſtitialem tubo 3 pedum.

6^h	40′	2″	St. μ in horario.
	43	4	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	3	2	44′ 1″
6	49	32	St. μ in horario.
	52	52	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	3	20	43′ 18″
6	57	30	St. μ in horario.
7	1	0	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	3	30	42′ 43″
7	15	10	St. μ in horario.
	19	6	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	3	56	41′ 34″
7	22	51	St. μ in horario.
	26	56	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	4	5	41′ 2″
7	33	52	St. μ in horario.
	38	15	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	4	23	39′ 59″
7	43	40	St. μ in horario.
	48	18	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	4	38	39′ 10″

8^h	0′	10″	St. μ in horario.
	5	13	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	5	3	37′ 48″
8	8	29	St. μ in horario.
	13	45	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	5	16	37′ 15″
8	16	52	St. μ in horario.
	22	21	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	5	29	36′ 19″
8	24	20	St. μ in horario.
	30	1	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	5	41	35′ 44″.
			Diam. ☾$^{\alpha}$ 30′ 12″.
			Mora in h. 2′ 14″;
			☾$^{\alpha}$ alta 19½°.
8	41	31	St. μ in horario.
	47	39	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	6	8	34′ 11″
8	50	12	St. μ in horario.
	56	33	L. ☾$^{\alpha}$ occ. in hor. &
———			bor. auſtralior ſtellâ
	6	21	33′ 26″.

8^h 58′ 28″ St. μ in horario.
9 5 1 L. ☾ª occ. in h. & bor. auſtralior ſtellâ 32′ 36″.

6 33

Sept. 28 veſpere ☾ª cum ſtella π in capite Sagittarii tubo 3 pedum, & primum

6^h 30′ 0″ Stabat ☾ª non-quidem in linea cornuum, ☾ª jam gibba, ſed quoad putabam, in linea tranſeunte per loca cornuum, & per centrum ☾ª diſtans a limbo boreo in auſtrum 1° 3′ 49″. Tum vero

7 15 35 Limbus occiduus ☾ª in horario.
16 1 St. π in h. auſtralior limbo auſtrino ☾ª 38′ 16″

0 26
7 20 39 L. occiduus ☾ª in horario.
58 St. π in h. auſtralior limbo auſtrino ☾ª 38 45

19
7 24 28 Limbus occiduus ☾ª in horario.
41 St. π in h. auſtralior limbo auſtrino ☾ª 39 7

13
7 31 45 Limbus occiduus ☾ª in horario.
48 St. π in h. auſtralior limbo auſtrino ☾ª 39 46.

3

$7^h\ 44'\ 29''$ St. π in horario.
44 L. occid. ☾ᵃ in h. & auſtrinus boreal. ſtellâ 41′ 18″.

15

Hic capta Diam. ☾ᵃ 30′ 12″. Mora in hor. 2′ 13″; ☾ᵃ alt. 30°.

8	3	33	St. π in horario.
	4	16	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	0	43	43′ 9″
8	23	41	St. π in horario.
	24	53	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	1	12	45′ 39″
8	27	2	St. π in horario.
	28	20	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	1	18	45′ 56″
8	30	16	St. π in horario.
	31	38	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	1	22	46′ 20″
8^h	51′	17″	St. π in horario.
	53	10	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	1	53	48′ 18″
8	55	42	St. π in horario.
	57	42	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	2	0	49′ 25″
9	45	56	St. π in horario.
	49	16	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	3	20	55′ 32″
9	51	13	St. π in horario.
	54	43	L. occ. ☾ᵃ in hor. & auſtrin. boreal. ſtellâ
	3	30	56′ 30″.

Per occaſionem comparavi inter ſe ſtellas in capite Sagittarii ξ, ο, π.

Stella ξ occidentalior ſtellâ α 6′ 50″ pend. & ſtella ο occidentalior ſtellâ π 5′ 11″, ſtella ξ borealior ſtellâ ο 40′ 21″. Stella ο, & π diſtant inter ſe 1° 21′ 39″ circuli maximi.

Oct. 2 veſpere ☾ᵃ cum ſtella κ in ore urnæ Aquarii.

6^h 10′ 0″ ☾ª alta 30°, capta Diameter 32′ 25″. Mora in hor, 2′ 13″.

7 54 18 Macula in horario.
56 39 St. * in h. auſtralior
——— maculâ 7′ 50″
2 19

7 59 55 Macula in horario.
8 2 10 St. * in h. auſtralior
——— maculâ 9′ 3″
2 15

8 8 16 Macula in horario.
10 18 St. * in h. auſtralior
——— maculâ 10′ 54″
2 2

8 13 37 Macula in horario.
15 32 St. * in h. auſtralior
——— maculâ 11′ 49″
1 55

8^h 18′ 34″ Macula in horario.
20 22 St. * in h. auſtralior
——— maculâ 12′ 49″
1 48

8 26 39 Macula in horario.
28 16 St. * in h. auſtralior
——— maculâ 14′ 30″
1 37

8 31 21ª Macula in horario.
32 52½ St. * in h. auſtralior
——— maculâ 15′ 29″.
1 31½

Macula orientalior limbo occiduo 1′ 32″ pend. & boreal. auſtrino 26′ 47″ circuli.

9 50 0 Circiter ☾ª quaſi in merid. alta 45½°; capta rurſum ejus Diameter 32′ 31″. Mora in hor. 2′ 13″.

Oct. 3 veſpere ☾ª cum ſtella * in ventre Piſcis auſtrini, quam etiam occultavit. Ante autem

6^h 20′ 0″ Capta Diam. ☾ª 32′ 34″. Mora in hor. 2′ 14″; ☾ª alt. 22°.

7 16 23 Macula in horario.
47 St. * in h. borealior
——— maculâ 13′ 26″
24

7^h 21′ 26″ Macula in horario.
44 St. * in h. borealior
——— maculâ 12′ 38″.
18

7ʰ 24′ 59″ Macula in horario.
25 8½ St. κ in hor. borealior maculâ 11′ 39″.

9½

7 30 34 Mac. & ſtell. una in h. & ſtella boreal. maculâ 10′ 16″. Porro macula orientalior limbo occiduo ☾ 1′ 32″ penduli, & borealior auſtrino 27′ 32″.

7 54 0 Proxime diſparuit ſtella abſorpta a limbo ☾ inter Pythagoram & Anaximandrum, quin momentum Immerſionis notari præciſe potuerit, cum propter Lunæ plenæ claritatem, tum etiam propter debilitatem ſplendoris ſtellæ.

Oct. 14 mane ☾ cum ſtella ω ♌ in extremitate pedis dextri anterioris.

4ʰ 51′ 45″ Macula in horario.
54 16 St. ω in h. borealior maculâ 18′ 51″

2 31
4 56 22 Macula in horario.
58 46 St. ω in h. borealior maculâ 19′ 29″

2 24

5ʰ 1′ 42″ Macula in horario.
3 56 St. ω in h. borealior maculâ 20′ 22″.

2 14

Erat autem macula occidentalior limbo ortivo ☾ 0′ 12½″ pend. & borealior limbo auſtrino 17′ 36″ circuli. Diam. ☾ 32′ 1″. Mora in hor. 2′ 12″; ☾ alta 44°.

Dec. 4 veſpere ☾ cum ſtella ν ♊, in extremo pede ſiniſtro Caſtoris.

8^h 18′ 50″ St. ν in horario.
30 45 Mac. in h. auſtralior
——— ſtellâ 12′ 17″
11 55
8 33 18 St. ν in horario.
45 49 Mac. in h. auſtralior
——— ſtellâ 12′ 23″
12 31
8 48 46 St. ν in horario.
9 1 54 Mac. in h. auſtralior
——— ſtellâ 12′ 44″
13 8
9 5 22 St. ν in horario.
19 11 Mac. in h. auſtralior
——— ſtellâ 12′ 42″
13 49
9 22 8 St. ν in horario.
36 38 Mac. in h. auſtralior
——— ſtellâ 13′ 8″.
14 30

Hic capta Diam. ☾ª 33′ 58″. Mora in h. 2′ 29″; ☾ª alta 35°. Macula occidentalior limbo ortivo 0′ 20″ pend. & auſtralior boreo 11′ 14″.

9^h 52′ 11″ St. ν in horario.
10 7 47 Mac. in h. auſtral.
——— ſtellâ 13′ 46″
15 36
10 13 15 St. ν in horario.
29 39 Mac. in h. auſtral.
——— ſtellâ 14′ 4″
16 24
10 34 9 St. ν in horario.
51 20 Mac. in h. auſtral.
——— ſtellâ 14′ 35″.
17 11

Dec. 10 mane comparata ☾ª cum ſtella *e* ♌ in pede dextro poſteriore Leonis.

4^h 26′ 21″ Macula in horario.
27 43 St. *e* in h. auſtralior
——— maculâ 26′ 8″.
1 22

4^h 34′ 35″ Macula in horario.
35 48 St. *e* in h. auſtralior
——— maculâ 24′ 35″.
1 13

4^h	39′	21″	Macula in horario.
	40	27	St. *e* in h. auſtralior
	———		maculâ 23′ 46″
	1	6	
4	42	37	Macula in horario.
	43	38	St. *e* in h. auſtralior
	———		maculâ 22′ 54″
	1	1	
4	55	24	Macula in horario.
	56	12	St. *e* in h. auſtralior
	———		maculâ 20′ 26″
	0	48	

5^h	3′	31″	Macula in horario.
	4	8$\frac{1}{2}$	St. *e* in h. auſtralior
	———		maculâ 18′ 41″
		37$\frac{1}{2}$	
5	15	1	Macula in horario.
		23	St. *e* in h. auſtralior
	———		maculâ 16′ 31″
		22	
5	25	31	Macula in horario.
		39	St. *e* in h. auſtralior
	———		maculâ 14′ [illegible]4″.
		8	

5 40 13 ☾^{a} obtexit ſtellam *e* a Grimaldo verſus cornu auſtrinum prope contra Byrgium.
Latente ſtella capta Diam. ☾^{a} 31′ 33″. Mora in h. 2′ 6″; ☾^{a} alta 48°. Macula occidentalior limbo ortivo ☾^{a} 0′ 11$\frac{1}{2}$″ pend. & borealior auſtrino 15′ 38″.

Dec. 30 veſpere

8^h 10′ 22″ ☾^{a} texit ſtellam *ι* in Tauro, e regione Cavalerii & Galilei vidi teleſcopio 13 pedum.
Interea capta Diameter ☾^{a} 34′ 15″. Mora in hor. 2′ 31″.

9 25 40 Emerſionem vidit ſocius, teleſcopio 11 pedum, e regione maculæ auſtralioris duarum in mari Criſium.

1 15 18 Mora Occultationis, neque aliud obſervatum.

An. 1752.

Anno 1752.

Jan. 1 mane ☾[a] ad ſtellam 1 ♊ in pede ſiniſtro Caſtoris, quam etiam occultavit.

2[h]	30′	17″	Macula in horario.
	38	28	St. ν in h. auſtralior
	——	——	maculâ 18′ 38″
	8	11	
2	40	12	Macula in horario.
	48	0	St. ν in h. auſtralior
	——	——	maculâ 17′ 38″
	7	48	
2	52	30	Macula in horario.
	59	54	St. ν in h. auſtralior
	——	——	maculâ 16′ 8″
	7	24	
3	2	27	Macula in horario.
	9	28	St. ν in h. auſtralior
	——	——	maculâ 14′ 48″
	7	1	
3	11	19	Macula in horario.
	17	59	St. ν in h. auſtralior
	——	——	maculâ 14′ 4″
	6	40	
3	19	56	Macula in horario.
	26	18	St. ν in h. auſtralior
	——	——	maculâ 12′ 43″
	6	22	

3[h]	35′	45″	Macula in horario.
	41	30	St. ν in h. auſtralior
	——	——	maculâ 10′ 52″
	5	45	
3	43	17	Macula in horario.
	48	46	St. ν in h. auſtralior
	——	——	maculâ 9′ 54″
	5	29	
3	50	12	Macula in horario.
	55	25	St. ν in h. auſtralior
	——	——	maculâ 9′ 3″
	5	13	
3	58	9	Macula in horario.
4	3	3	St. ν in h. auſtralior
	——	——	maculâ 7′ 54″.
	4	54	

Diam. ☾[a] 34′ 4″. Mora in hor. 2′ 30″; ☾[a] alt. 30°. Macula orientalior limbo occid. 2′ 6″, & borealior auſtrino 23′ 3″, & auſtralior boreo 11′ 5″; igitur alia via Diamet. ☾[a] 34′ 8″.

4h 29′ 10″	Macula in horario.	5h 13′ 20″	Macula in horario.
32 49	St. ν in h. auſtralior	15 6	St. ν in h. borealior
———	maculâ 4′ 8″	———	maculâ 2′ 4″
3 39		1 46	
4 38 31	Macula in horario.	5 17 41	Macula in horario.
41 46	St. ν in h. auſtralior	19 15	St. ν in h. borealior
———	maculâ 2′ 46″	———	maculâ 2′ 35″
3 15		1 34	
4 47 0	Macula in horario.	5 23 15	Macula in horario.
49 56	St. ν in h. auſtralior	24 35	St. ν in h. borealior
———	maculâ 1′ 29″	———	maculâ 3′ 33″
2 56		1 20	
4 51 58	Macula in horario.	5 27 26	Macula in horario.
54 40	St. ν in h. auſtralior	28 35	St. ν in h. borealior
———	maculâ 0′ 52″	———	maculâ 4′ 6″
2 46		1 9	
4 59 18	Macula in horario.	5 30 56	Macula in horario.
5 1 41	St. ν in eod. parallel.	31 55	St. ν in h. borealior
———	cum maculâ 0′ 0″	———	maculâ 4′ 28″
2 23		0 59	
5 3 50	Macula in horario.	5 34 12	Macula in horario.
6 0	St. ν jam borealior	35 4	St. ν in h. borealior
———	maculâ 0′ 44″	———	maculâ vacat.
2 10		0 52	

5 55 10 St. ν videri deſiit ſive revera immerſa ſub limbum, ſive ob magnum ſplendorem ☾, & undulationem, & aliquos vapores prope horizontem.

Jan. 11 mane ☾ cum ſtella ι ♎, quam etiam texit, ſed neque Immerſio viſa, neque Emerſio. Poſt autem

4^h	10′	35″	St. ι in horario.
	13	39	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	3	4	27′ 36″
4	22	31	St. ι in horario.
	25	56	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	3	25	29′ 10″
4	27	53	St. ι in horario.
	30	4	Cornu auſtr. ☾^{a} in h.
		39	Cornu bor. ☾^{a} in h.
	31	26	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	3	33	30′ 1″
4	34	10	St. ι in horario.
	36	31	Cornu auſtr. ☾^{a} in h.
	37	5	Cornu bor. ☾^{a} in h.
	37	52	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	3	42	30′ 51″
4	39	33	St. ι in horario.
	42	2	Cornu auſtr. ☾^{a} in h.
		37	Cornu bor. ☾^{a} in h.
	43	23	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	3	50	31′ 37″
4	44	53	St. ι in horario.
	47	28	Cornu auſtr. ☾^{a} in h.
	48	3	Cornu bor. ☾^{a} in h.

4^h	48′	50″	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	3	57	32′ 31″
4	50	36	St. ι in horario.
	53	22	Cornu auſtr. ☾^{a} in h.
		56	Cornu bor. ☾^{a} in h.
	54	43	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	4	7	33′ 9″
4	57	29	St. ι in horario.
5	0	24	Cornu auſtr. ☾^{a} in h.
		58	Cornu bor. ☾^{a} in h.
	1	45½	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	4	16½	34′ 17″
5	3	17	St. ι in horario.
	6	19	Cornu auſtr. ☾^{a} in h.
		53½	Cornu bor. ☾^{a} in h.
	7	40	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	4	23	34′ 56″
5	8	54	St. ι in horario.
	12	6	Cornu auſtr. ☾^{a} in h.
		41	Cornu bor. ☾^{a} in h.
	13	28	L. ☾^{a} ort. in hor. &
	———		auſtrin. auſtral. ſtellâ
	4	34	35′ 49″.

Diam. ☾^{a} 30′ 11″. Mora in h. 2′ 9″; ☾^{a} tu 15°

Jan. 27 veſpere ☾ᵃ occultavit ſtellam ζ in cornu auſtrino ♉. Igitur ante Immerſionem

5ʰ 37′ 52″	Macula in horario.	5ʰ 54′ 23″	Macula in horario.
39 31	St. ζ in h. auſtralior	55 29	St. ζ in h. auſtralior
———	maculâ 13′ 47″	———	maculâ 14′ 4″
1 39		1 6	
5 43 10	Macula in horario.	5 57 4	Macula in horario.
44 36	St. ζ in h. auſtralior	58 3	St. ζ in h. auſtralior.
———	maculâ 14′ 2″	———	maculâ 14′ 45″
1 26		0 59	
5 50 52	Macula in horario.	5 59 42	Macula in horario.
52 4	St. ζ in h. auſtralior	6 0 37	St. ζ in h. auſtralior
———	maculâ 14′ 20″	———	maculâ 14′ 45″.
1 12		0 55	

6 17 26 Immerſio ſtellæ viſa a ſocio teleſcopio 14 pedum.

7 21 58 Vidi Emerſionem ſtellæ teleſcopio 13 pedum, certam inter unum alterumve ſecundum. Tum capta Diam. ☾ᵃ 33′ 52″. Mora in h. 2′ 29″; ☾ᵃ alt. 68°. Macula orientalior limbo occiduo ☾ᵃ 1′ 59½″, & borealior auſtrino 24′ 8″ circuli.

7ʰ 57′ 37″	St. ζ in horario.	8ʰ 17′ 15″	St. ζ in horario.
58 33	L. occ. ☾ᵃ in h.	18 46	L. occ. ☾ᵃ in h.
8 0 33	Mac. in h. borealior	20 45	Mac. in h. borealior
———	ſtellâ 16′ 47″	———	ſtellâ 16′ 53″
2 56		3 30	
8 7 24	St. ζ in horario.	8 29 30½	St. ζ in horario.
8 35	L. occ. ☾ᵃ in h.	31 14	L. occ. ☾ᵃ in h.
10 35	Mac. in h. borealior	33 13	Mac. in h. borealior
———	ſtellâ 17′ 2″	———	ſtellâ 16′ 14″.
3 11		3 42½	

h	m	s	
8^h	$48'$	$32''$	St. ζ in horario.
	50	58	L. occ. $☾^a$ in h.
	52	58	Mac. in h. borealior ſtellâ 16′ 18″
	4	26	

h	m	s	
8^h	$59'$	$42''$	St. ζ in horario.
9	2	30	L. occ. $☾^a$ in h.
	4	29½	Mac. in h. borealior ſtellâ 16′ 8″.
	4	47½	

Febr. 24 veſpere $☾^a$ cum ſtella ν ♊, quam etiam tegere debebat.

h	m	s	
6^h	$22'$	$16''$	Macula in horario.
	31	10	St. ν in h. auſtralior maculâ 6′ 39″
	8	54	
6	33	32	Macula in horario.
	42	7	St. ν in h. auſtralior maculâ 6′ 19″
	8	35	
6	48	43	Macula in horario.
	56	51	St. ν in h. auſtralior maculâ 6′ 1″
	8	8	& poſt culmin. $☾^a$

h	m	s	
8^h	$16'$	$35\frac{1}{2}''$	Macula in horario.
	22	13	St. ν in h. auſtralior maculâ 1′ 16″
	5	37½	
8	28	10	Macula in horario.
	33	28	St. ν in h. auſtralior maculâ vacat.
	5	18	
8	37	52	Macula in horario.
	42	54	St. ν in eod. parallelo cum macula 0′ 0″.
	5	2	

Macula hæc erat Copernicus, borealior limbo auſtrino $☾^a$ 18′ 28″, neque aliud obtineri potuit, denſis nubibus totum cœlum obducentibus.

Febr. 28 mane poſt mediam noctem

$1^h\ 51'\ 38''$ $☾^a$ texit ſtellam ω in extremitate unguis pedis dextri Leonis, viſum bene. Immerſio fuit e regione Galilei, nec aliud ultra obſervatum.

Mart. 21 veſpere ☾^{a} cum ſtella ι ♉ prope eductionem cornu auſtrini.

7^h	51′	8″	St. ι in horario.	
	53	10	Mac. in h. auſtralior	
	———		ſtellâ	38′ 27″
	1	52		
7	57	2	St. ι in horario.	
	59	8	Mac. in h. auſtralior	
	———		ſtellâ	38′ 35″
	2	6		
8	0	40	St. ι in horario.	
	2	52	Mac. in h. auſtralior	
	———		ſtellâ	38′ 39″
	2	12		
8	6	25	St. ι in horario.	
	8	50	Mac. in h. auſtralior	
	———		ſtellâ	38′ 53″
	2	25		
8	10	50	St. ι in horario.	
	13	21	Mac. in h. auſtralior	
	———		ſtellâ	39′ 2″
	2	31		

8^h	30′	1″	St. ι in horario.	
	33	14	Mac. in h. auſtralior	
	———		ſtellâ	39′ 50″
	3	13		
8	50	43	St. ι in horario.	
	54	43	Mac. in h. auſtralior	
	———		ſtellâ	40′ 43″
	4	0		
8	59	19	St. ι in horario.	
9	3	36	Mac. in h. auſtralior	
	———		ſtellâ	41′ 10″
	4	17		
9	5	28	St. ι in horario.	
	10	1	Mac. in h. auſtralior	
	———		ſtellâ	41′ 21″.
	4	33		

Macula orientalior limbo occid. ☾^{a} 0′ 41″ pend. & auſtralior boreo 13′ 35″.

Diameter ☾^{a} 32′ 59″. Mora in h. 2′ 26″; ☾^{a} alta 30°.

Maji. 3 mane poſt med. noct. ☾^{a} texerat ſtellam μ in arcu Sagittarii. Nec Immerſio viſa, nec Emerſio. Poſt autem

3^h	26′	37″	St. μ in horario.	
	31	26	L. ☾^{a} ort. in hor. &	
	———		auſtrin. auſtral. ſtellâ	
	4	49		16′ 53″

3^h	32′	43″	St. μ in horario.	
	37	41	L. ☾^{a} ort. in hor. &	
	———		auſtrin. auſtral. ſtellâ	
	4	58		16′ 28″.

3^h	$40'$	$1''$	St. μ in horario.
	45	10	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	5	11	$16'\ 5''$
3	46	46	St. μ in horario.
	52	5	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	5	19	$15'\ 35''$
3	53	40	St. μ in horario.
	59	8	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	5	28	$15'\ 20''$.
			Hic capta Diameter ☾^{a} $30'\ 11''$. Mora in h. $2'\ 11''$; altit. ☾^{a} neglecta.
4	7	55	St. μ in horario.
	13	42	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	5	47	$15'\ 9''$

4^h	$24'$	$30''$	St. μ in horario.
	30	40	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	10	$13'\ 41''$
4	32	24	St. μ in horario.
	38	44	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	20	$13'\ 22''$
4	40	53	St. μ in horario.
	47	26	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	33	$12'\ 40''$
4	49	59	St. μ in horario.
	56	45	L. ☾^{a} ort. in hor. &
———			auſtrin. auſtral. ſtellâ
	6	46	$11'\ 58''$.

Maji. 27 veſpere ☾^{a} cum ſtella ω ♏ borealiore duarum.

8^h	$39'$	$16''$	St. ω in horario.
	40	43	L. ☾^{a} occ. in hor. &
———			boreus auſtral. ſtellâ
	1	27	$12'\ 23''$
8	43	50	St. ω in horario.
	45	22	L. ☾^{a} occ. in hor. &
———			boreus auſtral. ſtellâ
	1	32	$13'\ 0''$

9^h	$0'$	$34''$	St. ω in horario.
	2	34	L. ☾^{a} occ. in hor. &
———			boreus auſtral. ſtellâ
	2	0	$14'\ 45''$
9	5	48	St. ω in horario.
	7	55	L. ☾^{a} occ. in hor. &
———			boreus auſtral. ſtellâ
	2	7	$15'\ 18''$.

9^{h}	11′	59″	St. ω in horario.
	14	18	L. ☾$^{\alpha}$ occ. in hor. &
	———		boreus auſtral. ſtellâ
	2	19	15′ 43″
9	18	7	St. ω in horario.
	20	32	L. ☾$^{\alpha}$ occ. in hor. &
	———		boreus auſtral. ſtellâ
	2	25	16′ 33″
9	26	58	St. ω in horario.
	29	38	L. ☾$^{\alpha}$ occ. in hor. &
	———		boreus auſtral. ſtellâ
	2	40	17′ 19″

9^{h}	34′	35″	St. ω in horario.
	37	26	L. ☾$^{\alpha}$ occ. in hor. &
	———		boreus auſtral. ſtellâ
	2	51	17′ 51″
9	41	49	St. ω in horario.
	44	50	L. ☾$^{\alpha}$ occ. in hor. &
	———		boreus auſtral. ſtellâ
	3	1	18′ 36″
9	49	49	St. ω in horario.
	53	3	L. ☾$^{\alpha}$ occ. in hor. &
	———		boreus auſtral. ſtellâ
	3	14	19′ 19″.

Diam. ☾$^{\alpha}$ 30′ 13″. Mora in h. 2′ 12″; ☾$^{\alpha}$ alta 28°. Tempora dubia; ſolum certa ad medium minutum vel 30″.

Oct. 3 mane comparata ☾$^{\alpha}$ cum ſtella α ♋.

3^{h}	13′	56″	St. α in horario.
	15	58	L. ☾$^{\alpha}$ ort. in h. &
	———		auſtrin. auſtral. ſtellâ
	2	2	46′ 4″
3	23	46	St. α in horario.
	26	11	L. ☾$^{\alpha}$ ort. in h. &
	———		auſtrin. auſtral. ſtellâ
	2	25	46′ 17″
3	30	10	St. α in horario.
	32	48	L. ☾$^{\alpha}$ ort. in h. &
	———		auſtrin. auſtral. ſtellâ
	2	38	48′ 9″

3^{h}	35′	50″	St. α in horario.
	38	42	L. ☾$^{\alpha}$ ort. in h. &
	———		auſtrin. auſtral. ſtellâ
	2	52	48′ 35″
3	43	6	St. α in horario.
	46	11	L. ☾$^{\alpha}$ ort. in h. &
	———		auſtrin. auſtral. ſtellâ
	3	5	49′ 49″.

Hic capta Diam. ☾$^{\alpha}$ 32′ 57″; at mora & altit. elapſæ ſunt.

3^h 59′ 59″ St. α in horario.
4 3 21 Mac. in h. auſtralior
——— ſtellâ 33′ 25″
3 22
4 10 29 St. α in horario.
14 13 Mac. in h. auſtralior
——— ſtellâ 34′ 48″
3 44
4 20 27 St. α in horario.
24 32 Mac. in h. auſtralior
——— ſtellâ 35′ 57″
4 5
4 35 45 St. α in horario.
40 20 Mac. in h. auſtralior
——— ſtellâ 38′ 6″
4 35

4^h 50′ 10″ St. α in horario.
55 10 Mac. in h. auſtralior
——— ſtellâ 40′ 19″
5 0
5 2 9 St. α in horario.
7 31 Mac. in h. auſtralior
——— ſtellâ 41′ 56″
5 22
5 14 25 St. α in horario.
20 12 Mac. in h. auſtralior
——— ſtellâ 43′ 16″.
5 47

Macula occidentalior limbo ort. 0′ 17″ pend., & borealior auſtr. 18′ 38″ circuli.

CAPUT III.

CONGRESSUS PLANETARUM.

Anno 1747.

Jan. 2 mane cœpi comparare ♄^{um} cum ♂^{te}, & utrumque cum ſtella *m* in ♍.

2^h 39′ 22″ ♂ in horario.
46 36 St. *m* in h. auſtralior ♂^{te} 47′ 33″

2^h 49′ 38″ St. *m* in horario.
3 0 8 ♄ in hor. auſtralior ſtellâ 15′ 6″.

3ʰ 8′ 48″ ♂ in horario.
16 5 St. *m* in h. auſtralior ♂te 47′ 29″
3 19 47 St. *m* in horario.
30 17 ♄ in hor. auſtralior ſtellâ 15′ 11″
3 39 21 ♂ in horario.
46 37 St. *m* in h. auſtralior ♂te 47′ 32″
3 50 16 St. *m* in horario.
4 0 47 ♄ in hor. auſtralior ſtellâ 15′ 3″.
Ex his tribus Operationibus tutior viſa ſecunda.

Jan. 3 mane
2ʰ 44′ 26″ ♂ in horario.
49 55 St. *m* in h. auſtralior ♂te 36′ 37″
3 0 38 ♄ in h. auſtralior ♂te 52′ 32″
3 11 3 ♂ in horario.
16 27 St. *m* in h. auſtralior ♂te 36′ 33″
27 10 ♄ in h. auſtralior ♂te 52′ 32″

3ʰ 34′ 15″ ♂ in horario.
39 38 St. *m* in h. auſtralior ♂te 36′ 13″
50 22 ♄ in h. auſtralior ♂te 53′ 13″; tum in aurora
6 29 34 ♂ in horario.
34 45 St. *m* in h. auſtralior ♂te 34′ 46″
45 30 ♄ in h. auſtralior ♂te vacat.
6 53 31 ♂ in horario.
58 38 St. *m* in h. auſtralior ♂te 34′ 31″
7 9 23 ♄ in h. auſtralior ♂te 50′ 57″.

Jan. 4 mane
2ʰ 42′ 15″ ♂ in horario.
45 48 St. *m* in h. auſtralior ♂te 25′ 24″
56 44 ♄ in h. auſtralior ♂te 42′ 22″.
3 5 24 ♂ in horario.
8 55 St. *m* in h. auſtralior ♂te 25′ 9″
19 51 ♄ in h. auſtralior ♂te 42′ 11″.

6h 43′ 38″ ♂ in horario.
46 51 St. *m* in h. auſtralior ♂te 23′ 18″
57 48 ♄ in h. auſtralior ♂te 40′ 45″.

Jan. 5 mane
2h 38′ 44″ ♂ in horario.
40 23 St. *m* in h. auſtr. ♂te 14′ 10″
51 30 ♄ in h. auſtral. ♂te 32′ 19″
2 59 20 ♂ in horario.
3 0 59 St. *m* in h. auſtr. ♂te 14′ 10″
12 5 ♄ in h. auſtral. ♂te 32′ 11″
3 20 8 ♂ in horario.
21 44 St. *m* in h. auſtr. ♂te 14′ 6″
32 52 ♄ in h. auſtral. ♂te 32′ 1″
3 44 0 ♂ in horario.
45 33 St. *m* in h. auſtr. ♂te 14′ 0″
56 42 ♄ in h. auſtral. ♂te 31′ 52″.

Jan. 6 mane
2h 50′ 56″ St. *m* in hor.
51 12 ♂ in hor.
3 2 15 ♄ in h. auſtral. ♂te 22′ 15″
3 12 59 St. *m* in hor.
13 17 ♂ in hor.
24 19 ♄ in h. auſtral. ♂te 21′ 54″
3 45 8 ♂ in hor.
56 9 ♄ in h. auſtral. ♂te 21′ 56″.

Jan. 7 mane
2h 31′ 3″ St. *m* in hor.
33 11 ♂ in h. auſtr. *a *m* 7′ 30″
42 36. ♄ in h. auſtral. *a *m* 19′ 46″
2 48 13 St. *m* in hor.
50 21 ♂ in h. auſtral. *a *m* 7′ 19″
59 44 ♄ in h. auſtral. *a *m* 19′ 42″
3 3 44 St. *m* in hor.
5 54 ♂ in h. auſtral. *a *m* 7′ 23″
15 16 ♄ in h. auſtral. *a *m* 19′ 33″.

3h 27′ 49″ St. *m* in hor.
30 9 ♂ in h. auſtral. *a *m* 7′ 7″
39 21 ♄ in h. auſtral. *a *m* 19′ 25″
3 47 53 St. *m* in hor.
50 7 ♂ in h. auſtral. *a *m* 7′ 56″
59 26 ♄ in h. auſtral. *a *m* 19′ 42″; tum in aurora
6 39 54 St. *m* in hor.
42 20 ♂ in h. auſtral. *a *m* 9′ 10″
51 27 ♄ in h. auſtral. *a *m* 19′ 59″
7 2 50 ♂ in hor.
11 58 ♄ in h. auſtral. ♂te 10′ 21″.

Jan. 8 mane
3h 32′ 13″ St. *m* in hor.
36 13 ♂ in h. auſtral. *a *m* 17′ 59″
43 56 ♄ in h. auſtral. *a *m* 20′ 22″
3 1 8 St. *m* in hor.
5 11 ♂ in h. auſtral. *a *m* 18′ 5″
3h 12′ 52″ ♄ in h. auſtral. *a *m* 20′ 22″
3 18 38 St. *m* in hor.
22 42 ♂ in h. auſtral. *a *m* 18′ 7″
30 22 ♄ in h. auſtral. *a *m* 20′ 17″
3 34 26 St. *m* in hor.
38 30 ♂ in h. auſtral. *a *m* 18′ 32″
46 9 ♄ in h. auſtral. *a *m* 20′ 28″.

Jan. 9 mane
2h 34′ 43″ St. *m* in hor.
40 33 ♂ in h. auſtral. *a *m* 29′ 1″
46 37 ♄ in h. auſtral. *a *m* 21′ 31″
3 3 46 St. *m* in hor.
9 38 ♂ in h. auſtral. *a *m* 29′ 2″
15 37 ♄ in h. auſtral. *a *m* 21′ 37″, & hæc Obſerv. tutior.

Jan. 10 mane

3^h 3′ 1″ St. *m* in hor.
10 49 ♂ in h. auſtral. *ª *m* 39′ 38″
15 6 ♄ in h. auſtral. *ª *m* 22′ 0″
3 30 7 St. *m* in hor.
37 54 ♂ in h. auſtral. *ª *m* 39′ 42″
42 12 ♄ in h. auſtral. *ª *m* 21′ 56″, & in aurora
7 39 10 ♂ in hor.
43 13 ♄ in h. auſtral. *ª *m* 19′ 3″; ſed non ſcio quam bene.

Jan. 11 mane

2^h 21′ 23″ ♂ diſt. a ♄ 48′ 16″
2 31 45 St. *m* in hor.
41 18 ♂ in h. auſtral. *ª *m* 49′ 42″
43 58 ♄ in h. auſtral. *ª *m* 22′ 27″
2 51 21 St. *m* in hor.
3 0 57 ♂ in h. auſtral. *ª *m* 50′ 8″
3 25 ♄ in h. auſtral. *ª *m* 22′ 48″
3^h 8′ 48″ St. *m* in hor.
18 25 ♂ in h. auſtral. *ª *m* 50′ 8″
21 2 ♄ in h. auſtral. *ª *m* 22′ 48″
3 28 0 St. *m* in hor.
37 40 ♂ in h. auſtral. *ª *m* 50′ 18″
40 14 ♄ in h. auſtral. *ª *m* 22′ 48″
3 44 13 ♂ diſt. a ♄ 47 45
6 35 30 ♂ diſt. a ♄ 45 51.

Jan. 12 mane

2^h 23′ 25″ ♂ diſt. a ♄ 39′ 40″; tum poſt 3^h a 36′ ad 41′ repetita ter. Obſervatione ♂ occidentalior ♄° ſemel 53″, iterum tertio 54″, eratque ♄ conſtant. boreal. ♂^tis 37′ 49″, & diluculo
6 19 0 ♂ diſt. a ♄ 40′ 7″, & poſt 6^h a 30′ ad 33′ repetita bis operatione, numerata a ♂ ad ♄ ſemel 45″, iterum 44″, erat-

que ♄ ſemper borealior ♂^te^ 38′ 22″.

Jan. 13 mane primum
2^h^ 18′ 47″ ♂ diſt. a ♄no 47′ 32″
2 51 54 ♄ in hor.
52 43 ♂n in h. auſtralior ♄^no^ 46′ 42″.

Jan. 14 mane
3^h^ 42′ 48″ ♄ in hor.
45 12 ♂ in h. auſtralior ♄^no^ 56′ 46″
3 54 5 ♄ in hor.
56 30 ♂ in h. auſtralior. ♄^no^ 56′ 46″
Obſ. bona.
4 4 46 ♄ in hor.
7 10 ♂ in h. auſtralior ♄^no^ 56′ 56″
4 16 30 ♄ in hor.
18 56 ♂ in h. auſtralior ♄^no^ 56′ 56″.

Dec. 6 veſpere ☾^a^ occultavit ♂^em^, ubi & ♂ comparatus cum ſtella ι ♑, & ☾^a^ cum ſtella θ ♑.

4^h^ 52′ 17″ ♂ diſt. a limbo lucido remotiore ☾^a^ 49′ 42″; tum
5 3 9 ♂ in hor.
12 47 St. ι ♑ in h. boreal. ♂^te^ 40′ 47″
5 18 26 ♂ in hor.
28 2 St. ι ♑ in h. boreal. ♂^te^ 40′ 43″
5 34 34 ♂ diſparuit totus ad limbum obſcurum ☾^a^ diſtans a cornu bor. 23′ 18″. Capta illico Diam. ☾^a^ 32′ 38″; & dum ♂ poſt ☾^am^ latet.
5^h^ 58′ 9″ St. θ in hor.
6 3 31 L. occ. ☾^a^ in h.
4 23 Cornu bor. in h.
58 Cornu auſtr. in h. & limb. auſtrin. ☾^a^ auſtr. ſtellâ 34′ 12″.

6^h 11′ 36″ St. θ in hor.
17 22 L. occ. ☾^{æ} in h.
18 12 Cornu bor. in h.
46 Cornu auſtr. in h. & limb. auſtrin. ☾^{æ} auſtr. ſtellâ 30′ 45″
6 23 22 St. θ in hor.
29 26 L. occ. ☾^{æ} in h.
30 17 Cornu bor. in h.
52 Cornu auſtr in h. & limb. auſtrin. ☾^{æ} auſtr. ſtellâ 27′ 36″
6 38 52 Quædam parva ſtellula propinquans limbo obſcuro ☾^{æ} diſtabat a limbo lucido remotiore ☾^{æ} 41′ 4″.
6^h 46′ 2″ ♂ cœpit prodire de ſub limbo lucido ☾^{æ} diſtans a cornu ejus boreo 29′ 10″.
7 2 23 Supra dicta ſtellula diſparuit ad limbum obſcurum ☾^{æ} diſtans a cornu boreo item 29′ 11″.
7 12 24 ♂ diſtabat a limbo lucido propiore ☾^{æ} 11′ 25″.

Anno 1748.

Jan. 1 veſp. comparatus ♃ cum ♀re ſic:
5^{h}15′ 41″ ♃diſt. a ♀re 1° 3′ 20″
5 22 14 ♃ in hor.
25 6 ♀ in h. auſtralior ♃ve 50′ 12″
5^h 26′ 36″ ♃ in hor.
29 32 ♀ in h. auſtralior ♃ve 49′ 53″
5 30 35 ♃ in hor.
33 34 ♀ in h. auſtralior ♃ve 49′ 18″.

Mart. 11 veſpere cœpi comparare ♂ & ♀, poſt aliquot dies arcte conjungendos.
5^h 57′ 41″ ♀ in hor.
6 4 56 ♂ in h. borealior ♀^{re} 53′ 44″
6^h 9′ 44″ ♀ in hor.
16 58 ♂ in h. borealior ♀^{re} 53′ 25″.

6^h 20′ 38″ ♀ in hor.
27 52 ♂ in h. borealior ♀^{re}
53′ 13″
6 31 55 ♀ in hor.
39 9 ♂ in h. borealior ♀^{re}
53′ 15″
6 42 19 ♀ in hor.
49 31 ♂ in h. borealior ♀^{re}
53′ 6″
6 52 29 ♀ in hor.
59 40 ♂ in h. borealior ♀^{re}
53′ 5″.

Mart. 13 veſpere
5^h 51′ 43″ ♀ in hor.
55 29 ♂ in h. borealior ♀^{re}
27′ 38″
6 7 21 ♀ in hor.
11 6 ♂ in h. borealior ♀^{re}
27′ 34″
6 13 57 ♀ in hor.
17 41 ♂ in h. borealior ♀^{re}
27′ 16″
6 21 35 ♀ in hor.
25 19 ♂ in h. borealior ♀^{re}
27′ 14″
6 27 5 ♀ in hor.
30 48 ♂ in h. borealior ♀^{re}
27′ 14″

6^h 33′ 0″ ♀ in hor.
36 42 ♂ in h. borealior ♀^{re}
27′ 8″.
Cœlo jam obſcuriore viſa juxta ♂^{tem} ſtellula, quæ una obſervata ſic:
6 39 11 ♀ in hor.
42 54 ♂ in h. borealior ♀^{re}
27′ 5″
44 12 St. in h. boreal. ♀^{re}
12′ 28″
6 47 11 ♀ in hor.
50 54 ♂ in h. borealior ♀^{re}
26′ 57″
52 10 St. in h. boreal. ♀^{re}
12′ 9″
6 55 9 ♀ in hor.
58 52 ♂ in h. borealior ♀^{re}
26′ 49″
7 0 0 St. in h. boreal. ♀^{re}
12′ 7″.

Mart. 14 veſpere
5^h 55′ 42″ ♀ in hor.
57 41 ♂ in h. borealior ♀^{re}
14′ 46″.

6^h

6^h 0′ 2″ ♀ in hor.
2 2 ♂ in h. borealior ♀
14′ 33″
6 4 34 ♀ in hor.
6 33 ♂ in h. borealior ♀
14′ 35″
6 8 34 ♀ in hor.
10 32 ♂ in h. borealior ♀
14′ 30″
6 16 14 ♀ in hor.
18 12 ♂ in h. borealior ♀
14′ 27″
6 20 58 ♀ in hor.
22 57 ♂ in h. borealior ♀
14′ 21″
6 25 59 ♀ in hor.
27 57 ♂ in h. borealior ♀
14′ 19″
6 29 57½ ♀ in hor.
31 55 ♂ in h. borealior ♀
14′ 18″
6 36 0 ♂ diſt. a ♀ 32 17.

Mart. 15 veſpere
5^h 50′ 42″ ♀ in hor.
58 ♂ in h. borealior ♀
1′ 56″

5^h 58′ 26″ ♀ in hor.
41 ♂ in h. borealior ♀
1′ 56″
6 4 28 ♀ in hor.
43 ♂ in h. borealior ♀
1′ 48″
6 13 0 ♀ in hor.
14 ♂ in h. borealior ♀
1′ 41″
6 16 28 ♀ in hor.
42 ♂ in h. borealior ♀
1′ 41″
6 20 36 ♀ in hor.
50 ♂ in h. borealior ♀
1′ 41″
6 27 54 ♀ in hor.
28 6 ♂ in h. borealior ♀
1′ 29″
6 32 0 ♀ in hor.
12 ♂ in h. borealior ♀
1′ 28″
6 35 34 ♀ in hor.
46 ♂ in h. borealior ♀
1′ 29″
6 39 2 ♀ in hor.
13½ ♂ in h. borealior ♀
1′ 28″
6 44 41 ♀ in hor.
51½ ♂ in h. borealior ♀
1′ 28″.

6^h 48′ 55″ ♀ in hor.
46 6 ♂ in h. borealior ♀^{re} 1′ 22″
6 51 30 ♂ diſt. a ♀ 2′ 39″. Sub occaſum ♀ & ♂ volens Obſervationem repetere, propter vapores horizontales nihil certi obtinere potui, niſi ſub 8^h diſtantiam ♀^{ris} a ♂^{tis} 1′ 47″ paullo poſt, ſed ambigue viſa ♀ occidentalior ♂^{te} 0′ 3″ penduli, eodemque auſtral. 0′ 31″ circuli. Quam arcta ergo fuerit horum conjunctio, ex prioribus & poſterioribus calculo eruendum erit.

Mart. 16 veſpere
6^h 16′ 51″ ♂ in hor.
18 25 ♀ in h. borealior ♂ 10′ 32″
6^h 21′ 2″ ♂ in hor.
22 37 ♀ in h. borealior ♂ 10′ 35″
6 25 38 ♂ in hor.
27 13 ♀ in h. borealior ♂ 10′ 36″
6 32 8 ♂ in hor.
33 43 ♀ in h. borealior ♂ 10′ 37″
6 36 28 ♂ in hor.
38 4 ♀ in h. borealior ♂ 10′ 44″
6 51 33 ♂ in hor.
53 10 ♀ in h. borealior ♂ 10′ 46″
6 56 28 ♂ in hor.
58 5 ♀ in h. borealior ♂ 10′ 46″.

Mart. 17 veſpere
6^h 13′ 5″ ♂ in hor.
16 27 ♀ in h. borealior ♂ 23′ 0″
6 19 38½ ♂ in hor.
23 0 ♀ in h. borealior ♂ 22′ 59″
6 25 17 ♂ in hor.
28 38 ♀ in h. borealior ♂ 23′ 3″.

6^h 31′ 57″ ♂ in hor.
35 20 ♀ in h. borealior ♂ 23′ 12″
6 38 48 ♂ in hor.
42 10 ♀ in h. borealior ♂ 23′ 4″.

6^h 32′ 3½″ ♂ in hor.
39 0½ ♀ in h. borealior ♂ 47′ 47″
6 42 9 ♂ in hor.
49 8 ♀ in h. borealior ♂ 47′ 48″
6 51 21 ♂ in hor.
58 20 ♀ in h. borealior ♂ 47′ 56″
7 0 27 ♂ in hor.
7 27 ♀ in h. borealior ♂ 47′ 49″.

Mart. 19 veſpere
6^h 22′ 54″ ♂ in hor.
29 52 ♀ in h. borealior ♂ 47′ 32″

Maji. 1 veſpere comparatæ ☾ & ♀ ut non optime, ita neque admodum male.

7^h 36′ 22″ ♀ in hor.
43 13 L. ☾^{æ} occ. in h. & auſtrin. borealior ♀ 48′ 49″
7 51 36 ♀ in hor.
58 54 L. ☾^{æ} occ. in h. & auſtrin. borealior ♀ 47′ 32″

8^h 20′ 39″ ♀ in hor.
28 53 L. ☾^{æ} occ. in h. & auſtrin. auſtralior ♀ 44′ 36″
8 35 57 ♀ in hor.
44 45 L. ☾^{æ} occ. in h. & auſtrin. borealior ♀ 42′ 59″
8 48 0 Capta Diam. ☾^{æ} 29′ 53″.

Sept. 2 mane comparati inter ſe ♂ & ☿.

4^h	$45'$	$0''$ ☿ occident. ♂^{te}		$0'$	$31''$ pend. & auſtral.		$34'$	$12''$ circuli.
	47	0	— —	0	$32\frac{1}{2}$	— —	34	8
	49	0	— —	0	32	— —	34	15
	52	0	— —	0	32	— —	34	11
	55	0	— —	0	31	— —	34	11
	57	0	— —	0	31	— —	34	11
5	3	0	— —	0	31	— —	34	11
	6	0	— —	0	30	— —	34	12
	8	0	— —	0	$29\frac{1}{2}$	— —	34	12
	10	0	— —	0	29	— —	34	19
	11	0	— —	0	30	— —	34	13
	13	0	— —	0	29	— —	34	19
	15	0	— —	0	27	— —	34	19
	17	0	— —	0	$27\frac{1}{2}$	— —	34	13.

Sept. 3 mane

4^h $31'$ $5''$ ♂ in hor.
33 36 ☿ in h. auſtralior ♂
$36'$ $50''$

4 38 19 ♂ in hor.
40 50 ☿ in h. auſtralior ♂
$37'$ $0''$

4 47 49 ♂ in hor.
50 23 ☿ in h. auſtralior ♂
$37'$ $8''$

4 55 44 ♂ in hor.
58 18 ☿ in h. auſtralior ♂
$37'$ $15''$

5^h $2'$ $31''$ ♂ in hor.
5 7 ☿ in h. auſtralior ♂
$37'$ $13''$

5 6 40 ♂ in hor.
9 16 ☿ in h. auſtralior ♂
$37'$ $21''$

5 11 $4\frac{1}{2}$ ♂ in hor.
13 $40\frac{1}{2}$ ☿ in h. auſtralior ♂
$37'$ $21''$

5 17 0 ♂ diſt. a ☿ 53 18.

Sept. 4 mane
4h 45′ 47½″ ♂ in hor.
51 42½ ☿ in h. auſtralior ♂ 43′ 39″
Obſ. tuta.

4h 54′ 23″ ♂ in hor.
5 0 19½ ☿ in h. auſtralior ♂ 43′ 36″
5 4 4 ♂ in hor.
10 3 ☿ in h. auſtralior ♂ 43′ 39″.

Nov. 14 mane cœpi iterum comparare ♂tem cum ♀re prope ☊ diem conjungendas.

4h 56′ 54″ ♀ in hor.
5 3 4 ♂ in h. auſtralior ♀ 59′ 36″
5 15 16 ♀ in hor.
21 25 ♂ in h. auſtralior ♀ 59′ 27″
5 26 54 ♀ in hor.
33 1 ♂ in h. auſtralior ♀ 59′ 27″
5 37 24 ♀ in hor.
43 34 ♂ in h. auſtralior ♀ 59′ 17″
5 47 46 ♀ in hor.
53 55 ♂ in h. auſtralior ♀ 59′ 13″
6 8 4 ♀ in hor.
14 10 ♂ in h. auſtralior ♀ 59′ 13″

6h 18′ 20″ ♂ in hor.
24 25 ♀ in h. auſtralior ♂ 59′ 8″.
Porro cum ob magnam different. declinationum differentiæ aſcenſionum non admodum concordent, tutiores viſæ ſunt Operationes prima & ultima, ex quibus reliquæ corrigi poterunt.
6 24 25 ♂ in hor.
52 Stellula quædam in horario, quæ non eſt in Zod. ſtell. Flamſt. auſtralior ♀re 28′ 0″; igitur borealior ♂re 31′ 8″.

Nov. 15 mane

5h	0′	53″	♀ in hor.
	5	15	♂ in h. auſtralior ♀ 51′ 30″
5	8	28	♀ in hor.
	12	48	♂ in h. auſtralior ♀ 51′ 30″
5	15	42	♀ in hor.
	20	2	♂ in h. auſtralior ♀ 51′ 30″
5	23	17	♀ in hor.
	27	36	♂ in h. auſtralior ♀ 51′ 30″
6	24	16	♀ in hor.
	28	31	♂ in h. auſtralior ♀ 51′ 8″
6	33	3	♀ in hor.
	37	17	♂ in h. auſtralior ♀ 51′ 8″
6	44	10	♀ in hor.
	48	21	♂ in h. auſtralior ♀ 51′ 8″
6	50	20	♀ in hor.
	54	32	♂ in h. auſtralior ♀ 51′ 8″
7	0	27	♀ in hor.
	4	39	♂ in h. auſtralior ♀ 50′ 59″
7	9	3	♀ in hor.
	13	14	♂ in h. auſtralior ♀ 50′ 57″.

Nov. 16 mane

4h	54′	54″	♀ in hor.
	57	24	♂ in h. auſtralior ♀ 43′ 25″
4	59	22	♀ in hor.
5	1	50	♂ in h. auſtralior ♀ 43′ 25″
5	3	27	♀ in hor.
	5	56	♂ in h. auſtralior ♀ 43′ 27″
5	7	28	♀ in hor.
	9	57	♂ in h. auſtralior ♀ 43′ 26″
5	18	4	♀ diſt. a ♂ 57 25
6	40	5	♀ diſt. a ♂ 55 57
6	43	34	♀ in hor.
	45	58	♂ in h. auſtralior ♀ 42′ 42″
6	48	25	♀ in hor.
	50	46	♂ in h. auſtralior ♀ 42′ 53″
6	52	42	♀ in hor.
	55	5	♂ in h. auſtralior ♀ 42′ 42″
6	58	34	♀ in hor.
7	0	56	♂ in h. auſtralior ♀ 42′ 44″
7	4	22	♀ in hor.
	6	43	♂ in h. auſtralior ♀ 42′ 44″.

7ʰ 10′ 22″ ♀ in hor.
12 44 ♂ in h. auſtralior ♀ 42′ 42″
7 19 14 ♀ in hor.
21 34 ♂ in h. auſtralior ♀ 42′ 40″
7 23 48 ♀ in hor.
26 6 ♂ in h. auſtralior ♀ 42′ 40″
7 27 52 ♀ in hor.
30 10 ♂ in h. auſtralior ♀ 42′ 42″.

Nov. 17 mane Operatio unica, ſed tuta, poſtea nubes.

5ʰ 4′ 37″ ♀ in hor.
5 16 ♂ in h. auſtralior ♀ 34′ 56″.

Nov. 18 mane

4ʰ 57′ 2″ ♂ in hor.
58 14 ♀ in h. borealior ♂ 26′ 28″
5 3 9 ♂ in hor.
4 21 ♀ in h. borealior ♂ 26′ 27″

5ʰ 6′ 44″ ♂ in hor.
7 57 ♀ in h. borealior ♂ 26′ 22″
5 21 7 ♂ in hor.
22 21 ♀ in h. borealior ♂ 26′ 18″
5 24 48 ♂ in hor.
26 2 ♀ in h. borealior ♂ 26′ 19″
6 38 32 ♂ in hor.
39 52 ♀ in h. borealior ♂ 25′ 48″
6 42 29 ♂ in hor.
43 49 ♀ in h. borealior ♂ 25′ 49″
6 47 49 ♂ in hor.
49 9½ ♀ in h. borealior ♂ 25′ 49″
6 54 17 ♂ in hor.
55 38 ♀ in h. borealior ♂ 25′ 41″
6 59 29 ♂ diſt. a ♀ 32 54.

Nov. 22 mane comparati inter ſe ♂ & ♀, & ambo cum ſtella θ ♍.

4ʰ 56′ 10″ ♂ in hor.
5 5 15 ♀ in h. auſtralior ♂ dub. 6′ 55″.

5^h 9' 23'' ♂ in hor.
17 20. St. θ in h. auſtral. ♂ 16' 20''
18 13 ♀ in h. auſtralior ♂ 9' 10''
5 22 16 ♂ in hor.
30 12 St. θ in h. auſtral. ♂ 16' 16''
31 6 ♀ in h. auſtralior ♂ 9' 18''
5 35 12 ♂ in hor.
43 8 St. θ in h. auſtral. ♂ 16' 1''
44 5 ♀ in h. auſtralior ♂ 9' 18''
5 47 12 ♂ in hor.
55 4 St. θ in h. auſtral. ♂ 16' 16''
56 4 ♀ in h. auſtralior ♂ 9' 43''
6 1 42 ♀ in hor.
9 36 St. θ in h. auſtral. ♂ 15' 38''
10 37 ♀ in h. auſtralior ♂ 9' 24''
6 13 55 ♂ in hor.
21 46 St. θ in h. auſtral. ♂ 15' 45''
22 49 ♀ in h. auſtralior ♂ 9' 42''

6^h 25' 31'' ♂ in hor.
33 20 St. θ in h. auſtral. ♂ 15' 43''
34 26 ♀ in h. auſtralior ♂ 9' 47''
6 37 25 ♂ in hor.
45 14 St. θ in h. auſtral. ♂ 15' 20''
46 22 ♀ in h. auſtralior ♂ 9' 47''
6 48 34 ♂ in hor.
56 22 St. θ claro die male viſa.
57 33 ♀ in h. auſtralior ♂ 9' 49''.

Nov. 23 mane ♂ & ♀ cum θ ut heri.

4^h 55' 40'' ♂ in hor.
5 1 21 St. θ in h. auſtral. ♂ 2' 8''
6 21 ♀ in h. auſtralior ♂ 19' 17''
5 8 44 ♂ in hor.
14 26 St. θ in h. auſtra. ♂ 1' 56''
19 31 ♀ in h. auſtralior ♂ 18' 42''.

5^h

5^h 21′ 34″ ♂ in hor.
27 14 θ in h. auſtralior ♂ 1′ 56″
32 21 ♀ in h. auſtralior ♂ 18′ 40″
5 37 20 ♂ in hor.
43 0 θ in h. auſtralior ♂ 1′ 26″
48 11 ♀ in h. auſtralior ♂ 18′ 34″
5 56 30 ♂ in hor.
6 2 5 θ in h. auſtralior ♂ 1′ 39″
7 19 ♀ in h. auſtralior ♂ 18′ 55″
6 9 55 ♂ in hor.
15 29 θ in h. auſtralior ♂ 1′ 18″
20 46 ♀ in h. auſtralior ♂ vacat.

Nov. 24 mane
4^h 57′ 20″ ♂ in hor.
5 10 4 ♀ in h. auſtralior ♂ 27′ 44″
5 13 28 ♂ in hor.
26 12 ♀ in h. auſtralior ♂ 27′ 57″
5^h 28′ 28″ ♂ in hor.
41 15 ♀ in h. auſtralior ♂ 27′ 57″
5 43 55 ♂ in hor.
56 43 ♀ in h. auſtralior ♂ 28′ 1″.

Nov. 25 mane
4^h 53′ 50″ ♂ in hor.
5 8 31 ♀ in h. auſtralior ♂ 37′ 15″
5 11 57 ♂ in hor.
26 39 ♀ in h. auſtralior ♂ 37′ 21″
5 29 19 ♂ in hor.
44 4 ♀ in h. auſtralior ♂ 37′ 21″
5 47 11 ♂ in hor.
6 1 58 ♀ in h. auſtralior ♂ 37′ 30″
6 28 40 ♂ in hor.
29 41 θ ♍ in h. borealior ♂ 30′ 7″.

Nov. 26 mane
4^h 56′ 58″ ♂ in hor.
5 13 41 ♀ in h. auſtralior ♂ 46′ 52″.

$5^h\ 17'\ 34''$ ♂ in hor.
34 18 ♀ in h. auſtralior ♂
$46'\ 57''$
5 37 48 ♂ in hor.
54 34 ♀ in h. auſtralior ♂
$47'\ 2''$

$5^h\ 59'\ 22''$ ♂ in hor.
6 16 9 ♀ in h. auſtralior ♂
$47'\ 8''$.

Dec. 17 mane cœpi comparare ♀rem cum ♄no propediem conjungendos.

$5^h\ 45'\ 39''$ ♀ in hor.
55 11 ♄ in h. auſtralior ♀
$52'\ 58''$
5 57 45 ♀ in hor.
6 7 16 ♄ in h. auſtralior ♀
$52'\ 44''$
6 10 10 ♀ in hor.
19 40 ♄ in h. auſtralior ♀
$52'\ 26''$
6 21 42 ♀ in hor.
31 9 ♄ in h. auſtralior ♀
$52'\ 22''$
6 38 17 ♀ in hor.
47 40 ♄ in h. auſtralior ♀
$52'\ 16''$
6 49 31 ♀ in hor.
58 51 ♄ in h. auſtralior ♀
$52'\ 8''$
7 3 12 ♀ in hor.
12 32 ♄ in h. auſtralior ♀
$51'\ 51''$

$7^h\ 14'\ 29''$ ♀ in hor.
23 47 ♄ in h. auſtralior ♀
$51'\ 40''$.

Dec. 19 mane
$5^h\ 45'\ 31''$ ♀ in hor.
46 32 ♄ in h. auſtralior ♀
$13'\ 41''$
5 49 58 ♀ in hor.
50 58 ♄ in h. auſtralior ♀
$13'\ 39''$
5 53 26 ♀ in hor.
54 25 ♄ in h. auſtralior ♀
$13'\ 31''$
6 5 33 ♀ in hor.
6 31 ♄ in h. auſtralior ♀
$13'\ 18''$
6 8 24 ♀ in hor.
9 21 ♄ in h. auſtralior ♀
$13'\ 16''$.

6^h 12′ 50″ ♀ in hor.
13 47 ♄ in h. auſtralior ♀ 13′ 16″
6 18 39 ♀ in hor.
19 34 ♄ in h. auſtralior ♀ 13′ 8″
6 35 52 ♀ in hor.
36 44 ♄ in h. auſtralior ♀ 12′ 49″
6 39 20 ♀ in hor.
40 12 ♄ in h. auſtralior ♀ 12′ 48″
6 43 21 ♀ in hor.
44 12 ♄ in h. auſtralior ♀ 12′ 46″
7 2 44 ♀ in hor.
3 31 ♄ in h. auſtralior ♀ 12′ 36″
7 5 38 ♀ in hor.
6 24 ♄ in h. auſtralior ♀ 12′ 32″
7 11 33 ♀ in hor.
12 19 ♄ in h. auſtralior ♀ 12′ 25″.

Dec. 20 mane
5^h 36′ 55″ ♀ diſt. a ♄ 47′ 59″ tantum.

5^h 52′ 3″ ♄ in hor.
55 22 ♀ in h. auſtralior ♄ 5′ 33″
5 56 54 ♄ in hor.
6 0 13 ♀ in h. auſtralior ♄ 5′ 44″
6 2 18 ♄ in hor.
5 38 ♀ in h. auſtralior ♄ 5′ 44″
6 18 39 ♄ in hor.
22 4 ♀ in h. auſtralior ♄ 5′ 50″
6 24 21 ♄ in hor.
27 45 ♀ in h. auſtralior ♄ 5′ 59″
6 30 41 ♄ in hor.
34 6 ♀ in h. auſtralior ♄ 5′ 59″
6 46 35 ♄ in hor.
50 2 ♀ in h. auſtralior ♄ 6′ 15″
6 52 31 ♄ in hor.
56 0 ♀ in h. auſtralior ♄ 6′ 18″
6 58 14 ♄ in hor.
7 1 44 ♀ in h. auſtralior ♄ 6′ 26″
7 4 48 ♄ diſt. a ♀ 51′ 5″.

Dec. 21 mane
5^h 14′ 57″ ♄ in hor.
22 31 ♀ in h. auſtralior ♄ 23′ 43″
5 25 42 ♄ in hor.
33 16 ♀ in h. auſtralior ♄ 24′ 19″
5 35 27 ♄ in hor.
43 3 ♀ in h. auſtralior ♄ 24′ 19″
5 57 11 ♄ in hor.
6 4 51 ♀ in h. auſtralior ♄ 24′ 39″

6^h 13′ 28″ ♄ in hor.
21 11 ♀ in h. auſtralior ♄ 24′ 50″
6 23 31 ♄ in hor.
31 14 ♀ in h. auſtralior ♄ 25′ 6″
6 38 24 ♄ in hor.
46 9 ♀ in h. auſtralior ♄ 25′ 19″.

Anno 1749.

Jan. 14 mane cœpi comparare ♂^tem cum ♄^no, & utrumque cum ſtella ν majore, & borealiore duarum in ♎, cum qua jam heri comparavi ♂^tem, ut ſuo loco videre eſt.

5^h 27′ 3″ ♂ in hor.
28 27 St. ν in h. boreal. ♂ 3′ 35″
43 50 ♄ in h. borealior ♂ 1′ 8″
5 47 54 ♂ in hor.
6 4 35 ♄ in h. borealior ♂ 1′ 15″

6^h 10′ 3″ ♂ in hor.
11 23 St. ν in h. boreal. ♂ 3′ 49″
26 41 ♄ in h. borealior ♂ 1′ 21″
6 31 8 ♂ in hor.
32 25 St. ν in h. boreal. ♂ 4′ 6″
47 47 ♄ in h. borealior ♂ 1′ 36″.

6^h 50′ 11″ ♂ in hor.
51 27 St. ♀ in h. boreal. ♂ 4′ 12″
7 6 49 ♄ in h. borealior ♂ 1′ 41″.

Jan. 15 mane
3^h 35′ 23″ ♂ in hor.
50 14 ♄ in h. borealior ♂ 10′ 5″
4 1 14 ♂ in hor.
16 3 ♄ in h. borealior ♂ 10′ 11″
4 17 50 ♂ in hor.
32 35 ♄ in h. borealior ♂ 10′ 13″
4 37 58 ♂ in hor.
52 43 ♄ in h. borealior ♂ 10′ 23″
4 55 52 ♂ in hor.
5 10 34 ♄ in h. borealior ♂ 10′ 25″
5 12 23 ♂ in hor.
27 6 ♄ in h. borealior ♂ 10′ 40″
5 30 44 ♂ in hor.
45 24 ♄ in h. borealior ♂ 10′ 50″

5^h 49′ 17″ ♂ in hor.
6 3 56 ♄ in h. borealior ♂ 10′ 57″
6 5 37 ♂ in hor.
20 14 ♄ in h. borealior ♂ 11′ 4″
6 22 58 ♂ in hor.
37 34 ♄ in h. borealior ♂ 11′ 12″
6 39 53 ♂ diſt. a ſt. ♀ minore & auſtral. 12′ 42″
6 42 8 ♂ diſt. a ſt. ♀ majore & boreal. 21′ 28″
6 44 51 ♂ in hor.
59 25 ♄ in h. borealior ♂ 11′ 18″.

Jan. 16 mane
3^h 30′ 27″ ♂ in hor.
43 16 ♄ in h. borealior ♂ 19′ 28″
3 45 36 ♂ in hor.
58 23 ♄ in h. borealior ♂ 19′ 35″
4 0 23 ♂ in hor.
13 8 ♄ in h. borealior ♂ 19′ 46″.

4^h 15′ 35″ ♂ in hor.
28 19 ♄ in h. borealior ♂ 19′ 54″
4 31 2 ♂ in hor.
43 44 ♄ in h. borealior ♂ 19′ 56″
4 46 5 ♂ in hor.
58 46 ♄ in h. borealior ♂ 19′ 56″.

Tum comparatus ♄ cum 3 ſtellis ζ, quæ ſunt inter ♎ & ♏ ſic:

5 1 23 ♄ in hor.
6 53 St. 1ma in h. auſtralior ♄ 28′ 43″
9 18 St. 2da in h. auſtralior ♄ 23′ 1″
11 30 St. 3tia in h. auſtralior ♄ vacat.
5 16 0 ♄ in hor.
21 30 St. 1ma in h. auſtralior ♄ 28′ 43″
23 55 St. 2da in h. auſtralior ♄ 23′ 1″
26 8 St. 3tia in h. auſtralior ♄ 38′ 20″.

Atque hæc Operatio viſa priore tutior.

Sunt autem hæ 3 ſtellulæ & lumine, & magnitudine proxime æquales contra quam in Zodiac. ſtell. Flamſt.

Jan. 17 mane

4^h 31′ 48″ ♂ in hor.
42 28 ♄ in h. borealior ♂ 29′ 25″
4 48 28 ♂ in hor.
59 7 ♄ in h. borealior ♂ 29′ 36″
5 1 15 ♂ in hor.
11 51 ♄ in h. borealior ♂ 29′ 43″
5 14 22 ♂ in hor.
24 57 ♄ in h. borealior ♂ 29′ 50″
5 26 28 ♂ in hor.
37 2 ♄ in h. borealior ♂ 29′ 59″
5 38 42 ♂ in hor.
49 15 ♄ in h. borealior ♂ 29′ 59″.

Jan. 18 mane

4^h 18′ 43″ ♂ in hor.
27 20 ♄ in h. borealior ♂ 38′ 43″.

4^h 29′ 46″ ♂ in hor.
38 21 ♄ in h. borealior ♂ 38′ 47″
4 40 41 ♂ in hor.
49 14 ♄ in h. borealior ♂ 39′ 6″
5 1 31 ♂ in hor.
10 2 ♄ in h. borealior ♂ 39′ 18″
5 11 36 ♂ in hor.
20 8 ♄ in h. borealior ♂ 39′ 5″ dub.
5 22 36 ♂ in hor.
31 6 ♄ in h. borealior ♂ 39′ 16″
5 33 12 ♂ in hor.
41 42 ♄ in h. borealior ♂ 39′ 30″
5 44 35 ♂ in hor.
53 3 ♄ in h. borealior ♂ 39′ 30″.

Tum iterum comparatus ♄ cum 3 ſtellulis ♊ ut nudius tertius, ſed propter cœlum non ſatis ſudum aliquantum dubii.

5^h 55′ 41″ ♄ in hor.
6 0 37 St. 1ma in h. auſtralior ♄ 26′ 54″
2 59 St. 2da in h. auſtralior ♄ 21′ 29″
St. 3^{tia} non eſt viſa in horario, fuit auſtralior ♄ 37′ 12″.

Jan. 19 mane
3^h 28′ 17″ ♂ in hor.
34 53 ♄ in h. borealior ♂ 47′ 50″
3 37 58 ♂ in hor.
44 35 ♄ in h. borealior ♂ 47′ 45″
3 46 42 ♂ in hor.
53 17 ♄ in h. borealior ♂ 47′ 59″
4 5 15 ♂ in hor.
11 47 ♄ in h. borealior ♂ 48′ 8″
4 14 27 ♂ in hor.
20 57 ♄ in h. borealior ♂ 48′ 14″
4 23 16 ♂ in hor.
29 47 ♄ in h. borealior ♂ 48′ 24″.

Jan. 20 mane cum paral. ♂tis & ♄ni longius jam diſtarent, quam ut ambos tubus ordinarius 6 pedum caperet, accomodavi Micrometrum tubo 3 pedum.

6^h 12′ 38″ ♂ in hor.
16 52 ♄ in h. borealior ♂ 54′ 9″
6 21 1 ♂ in hor.
25 16 ♄ in h. borealior ♂ 53′ 53″
6 33 57 ♂ in hor.
38 11 ♄ in h. borealior ♂ 54′ 12″
6 41 8 ♂ diſt. a ♄ 1° 19 19
6 54 3 ♂ in hor.
58 17 ♄ in h. borealior ♂ 54′ 18″.

Jan. 21 mane tubo 3 pedum.

6^h 30′ 24″ ♂ in hor.
32 34 ♄ in h. borealior ♂ 1° 2′ 39″
6 36 11 ♂ in hor.
38 21 ♄ in h. borealior ♂ 1° 2′ 48″
6^h 39′ 59″ ♂ in hor.
42 9 ♄ in h. borealior ♂ 1° 2′ 48″
6 44 46 ♂ in hor.
46 56 ♄ in h. borealior ♂ 1° 2′ 58″
6 53 6 ♂ in hor.
55 16 ♄ in h. borealior ♂ 1° 2′ 48″.

Jan. 23 mane tubo 3 pedum.

6^h 10′ 18″ ♄ in hor.
12 15 ♂ in h. auſtralior ♄ 1° 19′ 45″
6 16 15 ♄ in hor.
18 11 ♂ in h. auſtralior ♄ 1° 19′ 48″
6 22 40 ♄ in hor.
24 38 ♂ in h. auſtralior ♄ 1° 19′ 45″
6 28 36 ♄ in hor.
30 37 ♂ in h. auſtralior ♄ 1° 19′ 45″
6 33 52 ♄ in hor.
35 53 ♂ in h. auſtralior ♄ 1° 19′ 51″
6 38 19 ♄ in hor.
40 20 ♂ in h. auſtralior ♄ 1° 19′ 48″.

6^h

6^h 43′ 37″ ♄ in hor.
45 39 ♂ in h. auſtralior ♄ 1° 19′ 48″

6^h 48′ 19″ ♄ in hor.
50 20 ♂ in h. auſtralior ♄ 1° 19′ 57″
6 53 14 ♄ diſtat a ♂ 1° 24′ 28″.

Nov. 13 veſpere, qui erat 4^tus^ dies Lunæ 10^mæ^, obſervata eſt, quoad ejus fieri potuit, ☾^a^ cum ♀ ſic:

5^h 15′ 49″ Limbus ☾^æ^ occiduus in horario.
20 54 ♀ in hor. auſtralior limbo auſtrino ☾^æ^, quanta proxime eſt Semidiameter ♀^ris^.
Tum capta Diameter ☾^æ^ 31′ 17″.
5 37 57 ♀ diſt. a limbo occiduo remotiore ☾^æ^ 1° 3′ 54″
5 47 18 ♀ diſt. ab eodem — — — 1 1 14.
Neque aliud obſervari potuit, ambobus ad occaſum properantibus.

Dec. 5 mane cœpi comparare ☿ cum ♄
6^h 17′ 13″ ☿ in hor.
27 16 ♄ in h. auſtralior ☿ 42′ 31″.
Operatio unica ſed tuta.

Dec. 6 mane
6^h 13′ 18″ ☿ in hor.
19 1 ♄ in h. auſtralior ☿ 19′ 48″
6 22 26 ☿ in hor.
28 8 ♄ in h. auſtralior ☿ 19′ 50″
6 31 39 ☿ in hor.
37 19 ♄ in h. auſtralior ☿ 19′ 41″.

6^h 44′ 23″ ☿ in hor.
50 2 ♄ in h. auſtralior ☿ 19′ 29″
7 4 8 ☿ in hor.
9 46 ♄ in h. auſtralior ☿ 19′ 25″.

Dec. 7 mane
6^h 1′ 27″ ☿ in hor.
2 41 ♄ in h. borealior ☿ 2′ 46″
6 4 3 ☿ in hor.
5 18 ♄ in h. borealior ☿ 2′ 39″
6 7 1 ☿ in hor.
8 14 ♄ in h. borealior ☿ 2′ 52″
6 14 19 ☿ in hor.
15 32 ♄ in h. borealior ☿ 2′ 56″
6 17 28 ☿ diſt. a ♄ 16′ 52″.

Dec. 8 mane
6^h 0′ 46″ ♄ in hor.
4 13 ☿ in h. auſtralior ♄ 26′ 3″.
6^h 5′ 34″ ♄ in hor.
9 4 ☿ in h. auſtralior ♄ 26′ 3″
6 9 49 ♄ in hor.
13 19½ ☿ in h. auſtralior ♄ 26′ 14″
6 15 16 ♄ in hor.
18 47½ ☿ in h. auſtralior ♄ 26′ 22″
6 21 29 ♄ in hor.
25 3 ☿ in h. auſtralior ♄ 26′ 31″
6 26 36 ♄ diſt. a ☿ 57′ 19″.

Dec. 9 mane ☿ & ♄ cum β ♏.
6^h 10′ 54″ ♄ in hor.
19 14 ☿ in h. auſtralior ♄ 49′ 26″
6 20 38 ☿ in hor.
26 53 β ♏ in h. boreal. ☿ 52′ 58″
6 38 51 ♄ in hor.
47 16 ☿ in h. auſtralior ♄ 50′ 5″
6 48 24 ☿ in hor.
54 38 β ♏ in h. boreal. ☿ vacat.
6 57 17 ♄ in hor.
7 5 50 ☿ in h. auſtralior ♄ 50′ 38″.

Cum hiſce diebus ♀ eſſet prope in eodem parallelo cum ☉, comparata eſt cum eodem ſic:

Dec. 6 a meridie

1^h 14′ 2″ Limbus ortivus ☉^{lis} in horario.

4 21 35 ♀ in hor. auſtralior limbo boreo Solis 41′ 44″.

Dec. 7 mane

9^h 3′ 20″ Limb. ort. ☉^{lis} in hor.

0 10 24 ♀ in hor. auſtralior limbo boreo Solis 23′ 22″.

Tum a meridie

0 50 54 Limb. ort. ☉^{lis} in hor.

3 57 4 ♀ in hor. auſtralior limbo boreo Solis 20 3.

Dec. 8 mane

8^h 50′ 41″ Limb. ort. ☉^{lis} in hor.

11 58 17 ♀ in hor. borealior limbo auſtrino Solis 33′ 20″.

Et a meridie

0 16 25 Limb. ort. ☉^{lis} in hor.

3 24 7 ♀ in hor. borealior limbo auſtrino Solis 33 40.

Dec. 28 veſpere cœpi comparare ♂ & ♃ ad conjunctionem euntes:

5^h 1′ 49″ ♂ in hor.

15 8 ♃ in h. borealior ♂ 41′ 50″

5^h 19′ 49″ ♂ in hor.

33 5 ♃ in h. borealior ♂ 41′ 58″

5 36 41 ♂ in hor.

49 57 ♃ in h. borealior ♂ 41′ 36″.

5^h	56′	15″	♂ in hor.
6	9	26	♃ in h. borealior ♂ 41′ 46″
6	16	55	♂ in hor.
	30	9	♃ in h. borealior ♂ 41′ 20″.

Dec. 29 veſpere

5^h	53′	36″	♂ in hor.
5	4	52	♃ in h. borealior ♂ 27′ 26″
5	9	23	♂ in hor.
	20	37	♃ in h. borealior ♂ 27′ 22″
5	33	37	♂ in hor.
	44	48	♃ in h. borealior ♂ 27′ 16″
5	51	40	♂ in hor.
6	2	50	♃ in h. borealior ♂ 27′ 8″
6	12	47	♂ in hor.
	23	55	♃ in h. borealior ♂ 26′ 56″.

Dec. 30 veſpere

4^h	46′	20″	♂ in hor.
	55	31	♃ in h. borealior ♂ 13′ 15″
4^h	58′	14″	♂ in hor.
5	7	25	♃ in h. borealior ♂ 13′ 20″
5	9	35	♂ in hor.
	18	43	♃ in h. borealior ♂ 13′ 3″
	20	28	Stell. quædam in h. bor. ♂te 19′ 46″
5	23	16	♂ in hor.
	32	25	♃ in h. borealior ♂ 13′ 8″
	34	9	Stell. quædam in h. bor. ♂ 19′ 44″
5	36	22	♂ in hor.
	45	29	♃ in h. borealior ♂ 12′ 56″
	47	13	Stell. quædam in h. bor. ♂ 19′ 34″
5	50	12	♂ in hor.
	59	18	♃ in h. borealior ♂ 11′ 52″
6	1	2	Stell. quædam in h. bor. ♂ 19′ 29″.

Dec. 31 veſpere

4	36	45	♂ in hor.
	43	52	♃ in h. auſtralior ♂ 0′ 38″.

4ʰ 48′ 55″ ♂ in hor.
56 3 ♃ in h. auſtralior ♂ 0′ 49″
4 58 23 ♂ in hor.
5 5 29½ ♃ in h. auſtralior ♂ 0′ 53″

5ʰ 7′ 52″ ♂ in hor.
14 58 ♃ in h. auſtralior ♂ 0′ 56″
5 19 6 ♂ in hor.
26 11 ♃ in h. auſtralior ♂ 1′ 6″.

Anno 1750.

Jan. 1 veſpere
4ʰ 25′ 11″ ♂ in hor.
30 17 ♃ in h. auſtralior ♂ 14′ 59″
4 34 31 ♂ in hor.
39 37 ♃ in h. auſtralior ♂ 14′ 52″
4 41 50 ♂ in hor.
46 55 ♃ in h. auſtralior ♂ 14′ 58″
4 48 44½ ♂ in hor.
53 49 ♃ in h. auſtralior ♂ 15′ 0″
4 55 48 ♂ in hor.
5 6 52 ♃ in h. auſtralior ♂ 15′ 11″
5 3 4 ♂ in hor.
8 7 ♃ in h. auſtralior ♂ 15′ 3″

5ʰ 8′ 49″ Stell. quædam, quæ 30 Dec. auſtralior ♂ 15′ 40″
5 15 22 ♂ in hor.
20 23½ ♃ in h. auſtralior ♂ 15′ 16″
21 5 Stell. quædam, quæ 30 Dec. auſtralior ♂ 15′ 51″
5 24 49 ♂ in hor.
29 52 ♃ in h. auſtralior ♂ 15′ 24″
30 34 Stell. quædam, quæ 30 Dec. auſtralior ♂ 16′ 6″.

Jan. 2 veſpere
4ʰ 9′ 40″ ♂ in hor.
12 47 ♃ in h. auſtralior ♂ 28′ 49″.

4^h 18′ 9″ ♂ in hor.
21 14 ♃ in h. auſtralior ♂ 29′ 4″
4 27 7 ♂ in hor.
30 11 ♃ in h. auſtralior ♂ 29′ 10″
4 35 15 ♂ diſt. a ♃ 54′ 31″
4 59 15 ♂ in hor.
5 2 14 ♃ in h. auſtralior ♂ 29′ 30″
5 11 9½ ♂ in hor.
14 10 ♃ in h. auſtralior ♂ 29′ 33″
5 18 8 ♂ in hor.
21 8 ♃ in h. auſtralior ♂ 29′ 37″
21 17 Stell. quædam, quæ 30 Dec. auſtralior ♂ 33′ 54″
5 25 52 ♂ in hor.
28 51 ♃ in h. auſtralior ♂ 29′ 41″
29 0 Stell. quædam, quæ 30 Dec. auſtralior ♂ 34′ 3″
5 35 30 ♂ in hor.
38 28 ♃ in h. auſtralior ♂ 29′ 47″
38 37 Stell. quædam, quæ 30 Dec. auſtralior ♂ 34′ 9″

5^h 46′ 57″ ♂ in hor.
49 54 ♃ in h. auſtralior ♂ 30′ 3″
50 2 Stell. quædam, quæ 30 Dec. auſtralior ♂ 34′ 23″
5 53 26 ♂ diſt. a ♃ 53′ 29″.

Jan. 3 veſpere
4^h 4′ 32″ ♂ in hor.
5 37 ♃ in h. auſtralior ♂ 42′ 59″
4 10 51 ♂ in hor.
11 55 ♃ in h. auſtralior ♂ 43′ 5″
4 14 12 ♂ in hor.
15 16 ♃ in h. auſtralior ♂ 43′ 5″
4 17 44 ♂ diſt. a ♃ 46 13.

Jan. 4 veſpere
4^h 27′ 5″ ♃ in hor.
28 5 ♂ in h. borealior ♃ 57′ 33″
4 28 58 ♃ in hor.
29 57 ♂ in h. borealior ♃ 57′ 33″.

4h 32′ 15½″ ♃ in hor.
33 16 ♂ in h. borealior ♃ 57′ 41″
4 36 51 ♃ in hor.
37 51½ ♂ in h. borealior ♃ 57′ 45″.

Jan. 23 cœpi comparare ♀ & ♃, quorum paralleli inter ſe appropinquabant, licet in æquatore multum adhuc diſtarent; itaque die claro a meridie
2h 14′ 11″ ♀ in hor.
38 55 ♃ in h. borealior ♀ 48′ 35″
2 54 53 ♀ in hor.
3 19 36 ♃ in h. borealior ♀ 48′ 20″
3 27 34 ♀ in hor.
52 16 ♃ in h. borealior ♀ 47′ 36″
3 57 39 ♀ in hor.
4 22 15 ♃ in h. borealior ♀ 47′ 19″
5 7 19 ♀ in hor.
31 46 ♃ in h. borealior ♀ 46′ 3″
5h 33′ 42″ ♀ in hor.
58 6 ♃ in h. borealior ♀ 45′ 41″
6 1 21 ♀ in hor.
25 43 ♃ in h. borealior ♀ 45′ 7″
6 29 2 ♀ in hor.
53 19 ♃ in h. borealior ♀ 44′ 54″. Tum comparata ♀ cum ſtella maxime orientali quatuor earum, quæ hic vicinæ ſunt infra ventrem piſcis auſtrini. Nempe
7 14 28 St. in hor.
17 4 ♀ in h. auſtral. ſtellâ 41′ 8″
7 19 3 ♀ in hor.
43 16 ♃ in h. borealior ♀ 43′ 22″.

Jan. 24 mane ante meridiem
11h 17′ 49″ ♀ in hor.
40 14 ♃ in h. borealior ♀ 27′ 22″.

1h 46′ 28″ ♀ & poſt meridiem
8 49 ♃ in h. borealior ♀ 27′ 0″
12 54 ♀ in hor.
35 12 ♃ in h. borealior ♀ 26′ 45″
29 10 ♀ in hor.
51 16 ♃ in h. borealior ♀ 24′ 12″
56 43 ♀ in hor.
18 44 ♃ in h. borealior ♀ 23′ 49″
23 57 ♀ in hor.
45 54 ♃ in h. borealior ♀ 23′ 23″
50 35 ♀ in hor.
12 31 ♃ in h. borealior ♀ 23′ 3″ dub. ob ventum.
21 21 ♀ in hor.
43 11 ♃ in h. borealior ♀ 22′ 33″
55 52 ♀ in hor.
17 39½ ♃ in h. borealior ♀ 21′ 53″
21 30 ♀ in hor.
43 15 ♃ in h. borealior ♀ 21′ 35″
48 50 ♀ in hor.
10 32 ♃ in h. borealior ♀ 21′ 5″

6h 16′ 36″ ♀ in hor.
38 15 ♃ in h. borealior ♀ 20′ 32″
7 20 10 ♀ in hor.
41 43 ♃ in h. borealior ♀ 20′ 11″.

Jan. 25 mane ante meridiem
11h 33′ 24″ ♀ in hor.
53 7 ♃ in h. borealior ♀ 2′ 46″
11 56 24 ♀ & poſt meridiem
0 16 4 ♃ in h. borealior ♀ 2′ 27″
0 21 50 ♀ in hor.
41 28 ♃ in h. borealior ♀ 2′ 8″.

Hic vero cœlum nubibus velari, tenuibus quidem, ut non impedirent aſpectum ♀ris; ♃er tamen videri non poſſet, atqui optabam videre ♃em in eodem parallelo cum ♀re hac jam borealiore facta ſub crepuſculum.

5h

5^h 7′ 29″ ♀ in hor.
26 37 ♃ in h. auſtralior ♀
2′ 35″
5 28 25 ♀ in hor.
47 31 ♃ in h. auſtralior ♀
2′ 38″
5 49 26 ♀ in hor.
6 8 30 ♃ in h. auſtralior ♀
3′ 7″
6 10 40 ♀ in hor.
29 41 ♃ in h. auſtralior ♀
3′ 25″
7 5 13 ♀ in hor.
24 9 ♃ in h. auſtralior ♀
4′ 39″.

Jan. 26 poſt merid.
3^h 35′ 47″ ♀ in hor.
52 28 ♃ in h. auſtralior ♀
25′ 13″
4 1 36 ♀ in hor.
18 15 ♃ in h. auſtralior ♀
25′ 24″
4 22 14 ♀ in hor.
38 50½ ♃ in h. auſtralior ♀
25′ 46″
4 41 24 ♀ in hor.
57 58 ♃ in h. auſtralior ♀
26′ 4″

5^h 2′ 40″ ♀ in hor.
19 13 ♃ in h. auſtralior ♀
26′ 26″
5 21 4 ♀ in hor.
37 36 ♃ in h. auſtralior ♀
26′ 50″
5 42 45 ♀ in hor.
59 13 ♃ in h. auſtralior ♀
27′ 8″
6 1 20 ♀ in hor.
17 46 ♃ in h. auſtralior ♀
27′ 25″
7 15 14 ♀ in hor.
31 33 ♃ in h. auſtralior ♀
28′ 59″.

Jan. 27 a meridie
1^h 18′ 8″ ♀ in hor.
32 30 ♃ in h. auſtralior ♀
46′ 45″
3 3 19 ♀ in hor.
17 31 ♃ in h. auſtralior ♀
48′ 49″
3 21 32 ♀ in hor.
35 42 ♃ in h. auſtralior ♀
48′ 58″
3 44 1 ♀ in hor.
58 9 ♃ in h. auſtralior ♀
49′ 18″.

4^h 2′ 0″ ♀ in hor.
16 6 ♃ in h. auſtralior ♀ 49′ 32″

4 19 31 ♀ in hor.
33 35 ♃ in h. auſtralior ♀ 49′ 50″

4 42 16 ♀ in hor.
56 18 ♃ in h. auſtralior ♀ 50′ 5″

5 2 32 ♀ in hor.
16 32 ♃ in h. auſtralior ♀ 50′ 32″

5 18 11 ♀ in hor.
32 8 ♃ in h. auſtralior ♀ 51′ 0″

5 35 57 ♀ in hor.
49 50 ♃ in h. auſtralior ♀ 51′ 33″

5 52 23 ♀ in hor.
6 6 17 ♃ in h. auſtralior ♀ 51′ 24″ err.

6 8 48 ♀ in hor.
22 39 ♃ in h. auſtralior ♀ 51′ 49″

6 26 42 ♀ in hor.
40 34 ♃ in h. auſtralior ♀ 51′ 51″

6 43 28 ♀ in hor.
57 14 ♃ in h. auſtralior ♀ 52′ 21″

6^h 59′ 31″ ♀ in hor.
7 13 20 ♃ in h. auſtralior ♀ 52′ 39″

7 17 56 ♀ in hor.
31 42 ♃ in h. auſtralior ♀ 52′ 48″.

Poſteriores hæ operationes, cum parum concordent, ex aliis prioribus, & ſequentibus facile corrigentur.

Jan. 28 a merid. tubo 3 ped.

2^h 48′ 41″ ♀ in hor.
3 0 23 ♃ in h. auſtralior ♀ 1° 7′ 19″

3 23 32 ♀ in hor.
35 9 ♃ in h. auſtralior ♀ 1° 7′ 57″

3 59 9 ♀ in hor.
4 10 43 ♃ in h. auſtralior ♀ 1° 8′ 14″

4 30 48 ♀ in hor.
42 17 ♃ in h. auſtralior ♀ 1° 9′ 17″

5 0 12 ♀ in hor.
11 40 ♃ in h. auſtralior ♀ 1° 9′ 30″.

5ʰ 16′ 41″ ♀ in hor.
28 8 ♃ in h. auſtralior ♀
1° 9′ 46″
5 31 30 ♀ in hor.
42 56 ♃ in h. auſtralior ♀
1° 9′ 57″

6ʰ 2′ 52″ ♀ in hor.
14 13 ♃ in h. auſtralior ♀
1° 10′ 40″.

Maji 8 veſpere ☾ᵃ texerat ♂ᵗᵉᵐ, ſed per lucem diei neque Immerſio viſa, nec Emerſio, poſt autem

7ʰ 16′ 38″ ♂ in hor.
20 42 L. occ. ☾ᵃ in h. & limb. auſtrin. auſtr. ♂
35′ 51″
7 26 38 ♂ in hor.
31 7 L. occ. ☾ᵃ in hor. & limb. auſtrin. auſtr. ♂
36′ 43″
7 35 20 ♂ in hor.
40 9 L. occ. ☾ᵃ in hor. & limb. auſtrin. auſtr. ♂
37′ 33″
7 48 59 ♂ in hor.
54 20 L. occ. ☾ᵃ in hor. & limb. auſtrin. auſtr. ♂
38′ 56″

7ʰ 57′ 54″ Stell. in h. auſtral. ♂
6′ 59″
8 3 7 ♂ in hor.
9 3 L. occ. ☾ᵃ in hor. & limb. auſtrin. auſtr. ♂
40′ 7″
12 0 Stell. in h. auſtral. ♂
7′ 5″.
Hæc ſtellula notatur in Zod. ſtell. Flamſt. in ♊ 20° cum latit. borea 0° 45′; proxime
Diametrum ☾ᵃ capere non licuit cornibus nondum formatis.

Jun 1 mane cœpi rurſum comparare ♃ᵛᵉᵐ cum ♀ʳᵉ, & initio quidem tubo 3 pedum.

4^h 58′ 1″ ♀ in hor.
59 35 ♃ in h. borealior ♀ 45′ 58″
5 2 40 ♀ in hor.
4 17 ♃ in h. borealior ♀ 45′ 50″
5 6 44 ♀ in hor.
8 19 ♃ in h. borealior ♀ 45′ 45″
5 10 53 ♀ in hor.
12 25 ♃ in h. borealior ♀ 45′ 56″
5 17 11 ♀ in hor.
18 43 ♃ in h. borealior ♀ 45′ 52″
5 26 19 ♀ in hor.
27 49 ♃ in h. borealior ♀ 45′ 48″.

Jun. 2 mane tubo 3 ped.
4^h 13′ 42″ ♃ in hor.
14 48 ♀ in h. auſtralior ♃ 38′ 51″
4 18 51 ♃ in hor.
19 58 ♀ in h. auſtralior ♃ 38′ 51″
4 24 49 ♃ in hor.
25 56 ♀ in h. auſtralior ♃ 38′ 55″

4^h 27′ 46″ ♃ in hor.
28 54 ♀ in h. auſtralior ♃ 38′ 51″
4 30 52 ♃ in hor.
32 1 ♀ in h. auſtralior ♃ 38′ 51″.

Jun. 5 mane tubo 6 ped.
3^h 59′ 18″ ♃ in hor.
4 8 39 ♀ in h. auſtralior ♃ 26′ 6″.

Jun. 6 mane
4^h 6′ 36″ ♃ in hor.
18 49 ♀ in h. auſtralior ♃ 14′ 18″.

Jun. 7 mane
3^h 50′ 37½″ ♃ in hor.
4 5 42 ♀ in h. auſtralior ♃ 1′ 12″
4 8 39 ♃ in hor.
23 45 ♀ in h. auſtralior ♃ 1′ 8″
4 27 8 ♃ in hor.
42 16 ♀ in h. auſtralior ♃ 0′ 51″.

Jun. 8 mane
$4^h\ 0'\ 49\frac{1}{2}''$ ♃ in hor.
18 50 ♀ in h. borealior ♃ $12'\ 29''$
4 21 3 ♃ in hor.
39 6 ♀ in h. borealior ♃ $12'\ 39''$.

Jun. 9 mane
$4^h\ 4'\ 28''$ ♃ in hor.
25 26 ♀ in h. borealior ♃ $26'\ 3''$
4 27 33 ♃ in hor.
48 35 ♀ in h. borealior ♃ $26'\ 15''$.

Oct. 17 mane cœpta comparari ♀^{mus} cum ♂^{te}, & ♂ cum ſtella ν ♍, in pectore Virginis

$5^h\ 36'\ 38''$ ♀ in hor.
39 16 ♂ in h. auſtralior ♀ $51'\ 32''$
5 40 59 ♀ in hor.
43 37 ♂ in h. auſtralior ♀ $51'\ 23''$
5 45 26 ♀ in hor.
48 4 ♂ in h. auſtralior ♀ $51'\ 26''$
5 50 1 St. ν in hor.
53 27 ♂ in h. auſtral. ſtellâ $45'\ 41''$
5 57 33 St. ν in hor.
6 1 1 ♂ in h. auſtral. ſtellâ $45'\ 51''$
6 4 32 St. ν in hor.
8 0 ♂ in h. auſtral. ſtellâ $45'\ 58''$
6 12 58 ♂ diſt. a ♀ $1°\ 4'\ 32''$.

Oct. 18 mane
$5^h\ 30'\ 38''$ ♀ in hor.
31 4 ♂ in h. auſtralior ♀ $37'\ 37''$
5 35 0 ♀ in hor.
35 25 ♂ in h. auſtralior ♀ $37'\ 45''$
5 38 47 ♀ in hor.
39 12½ ♂ in h. auſtralior ♀ $37'\ 45''$
5 42 32 ♀ in hor.
42 57 ♂ in h. auſtralior ♀ $37'\ 45''$.

Oct. 19 mane
$5^h\ 42'\ 24''$ ♂ in hor.
44 11 ♀ in h. borealior ♂ $23'\ 52''$.

$5^h\ 46'\ 26''$ ♂ in hor.
48 13 ♀ in h. borealior ♂ $23'\ 46''$
5 50 53 ♂ in hor.
52 40 ♀ in h. borealior ♂ $23'\ 44''$
5 55 8 ♂ in hor.
56 56 ♀ in h. borealior ♂ $23'\ 42''$
5 59 30 ♂ in hor.
6 1 18½ ♀ in h. borealior ♂ $23'\ 40''$
6 4 30 ♂ diſt. a ♀ $35'\ 54''$.

Oct. 20 mane
$5^h\ 46'\ 10''$ ♂ in hor.
50 10 ♀ in h. borealior ♂ $9'\ 50''$
5 54 18 ♂ in hor.
58 18 ♀ in h. borealior ♂ $9'\ 52''$
6 2 4 ♂ in hor.
6 4 ♀ in h. borealior ♂ $9'\ 42''$
6 12 10 ♂ diſt. a ♀ $1°\ 1'\ 18''$.

Nov. 6 mane cœpi comparare ☿^{ium} cum ♀^{re} ſic:

$6^h\ 6'\ 27''$ ♀ in hor.
16 18 ☿ in h. auſtralior ♀ $40'\ 55''$
6 18 10 ♀ in hor.
28 0 ☿ in h. auſtralior ♀ $40'\ 20''$
6 29 52 ♀ in hor.
39 39 ☿ in h. auſtralior ♀ $40'\ 13''$
6 42 5 ♀ in hor.
51 50 ☿ in h. auſtralior ♀ $39'\ 44''$.

Nov. 7 mane
$6^h\ 3'\ 0''$ ♀ in hor.
7 45 ☿ in h. borealior ♀ $1'\ 14''$
6 9 26 ♀ in hor.
14 10 ☿ in h. borealior ♀ $1'\ 28''$
6 24 28 ♀ in hor.
29 9 ☿ in h. borealior ♀ $1'\ 51''$
6 30 56 ♀ in hor.
35 36 ☿ in h. borealior ♀ $1'\ 58''$.

6^h 37′ 19″ ♀ in hor.
41 57 ☿ in h. borealior ♀
2′ 7″
6 44 3 ♀ in hor.
48 41 ☿ in h. borealior ♀
2′ 17″
6 50 53 ♀ in hor.
55 29 ☿ in h. borealior ♀
2′ 31″
6 58 3 ♀ in hor.
7 2 39 ☿ in h. borealior ♀
2′ 45″
7 4 45 ♀ in hor.
9 19 ☿ in h. borealior ♀
3′ 0″.

Nov. 8 mane
6^h 0′ 6″ ♀ in hor.
0 28 ☿ in h. borealior ♀
37′ 13″
6 4 20 ♀ in hor.
4 39 ☿ in h. borealior ♀
37′ 13″
6 7 14 ♀ in hor.
7 33 ☿ in h. borealior ♀
37′ 24″
6 12 53 ♀ in hor.
13 11 ☿ in h. borealior ♀
37′ 26″

6^h 17′ 23″ ♀ in hor.
39 ☿ in h. borealior ♀
37′ 38″
6 22 15 ♀ in hor.
28 ☿ in h. borealior ♀
37′ 45″
6 29 27 ♀ in hor.
40 ☿ in h. borealior ♀
37′ 59″
6 33 43 ♀ in hor.
55 ☿ in h. borealior ♀
38′ 6″
6 36 51 ♀ in hor.
37 2 ☿ in h. borealior ♀
38′ 10″
6 40 2 ♀ in hor.
12 ☿ in h. borealior ♀
38′ 14″
6 42 47 ♀ in hor.
57 ☿ in h. borealior ♀
38′ 18″.

Poſt duos dies, 10 Nov. comparatus ☿ cum ſtella *x*, quæ eſt ad limbum veſtis Virginis prope talum, ut videre eſt in Obſerv. ☿[ii].

Anno 1751.

Jan. 19 mane cœpi comparare ♂^{tem} cum ♄^{no}.

6^h 12′ 31″ ♂ in hor.
41 7 ♄ in h. borealior ♂ 10′ 59″.

Jan. 20 mane
4^h 54′ 48″ ♂ in hor.
5 21 9 ♄ in h. borealior ♂ 17′ 53″
5 52 28 ♂ in hor.
6 18 43 ♄ in h. borealior ♂ 18′ 28″.

Jan. 21 mane
4^h 53′ 20″ ♂ in hor.
5 17 18 ♄ in h. borealior ♂ 25′ 8″
5 19 49 ♂ in hor.
43 45½ ♄ in h. borealior ♂ 25′ 37″
5 46 33 ♂ in hor.
6 10 25 ♄ in h. borealior ♂ 25′ 48″
6 12 35 ♂ in hor.
36 24½ ♄ in h. borealior ♂ 25′ 48″.

Feb. 21 mane comparata ☾^{a} cum ♂^{te} poſt ☌, & uterque cum duabus ſtellulis intermediis, quarum prior, cum qua jam heri comparatus ♂ ponitur in Zod. ſtell. Flamſt. in ♐ 25° 37′ cum latit. auſtr. 0° 20′, poſterior in ♐ 28° 23′ cum latit. auſtr. 0° 14′; eſt autem poſterior hæc majuſcula & lucidiuſcula priore, contra quam ibidem pingitur.

4^h 54′ 13″ ♂ in horario.
57 42 Stella prior in h. auſtralior ♂ 18′ 17″
5 12 33 Cornu auſtr. in h.}
13 43 Limb. ort. in hor.} & limb. auſtrin. ☾^{æ} auſtr. ♂ 6 50.

5^h

5^h	16′	44½″	♂ in horario.		
	20	10	Stella prior in h. auſtralior ♂	18′	16″
	23	10	Alia quædam ſtellula in h. auſtralior ♂ non poſterior illa, ſed probabiliter $1^{mæ}$ trium proxime ſequentium ibi in Zod. ſtell. Flamſt.	47	41
5	24	29	♂ in horario.		
	27	54	Stella prior in h. auſtralior ♂	18′	17″
	39	49	Stella poſterior in h. auſtralior ♂	15	45
	43	36	Cornu auſtr. ☾^{æ} } & limb. auſtrin. ☾^{æ} auſtr. ♂	6	38
	44	45	Limb. ort. ☾^{æ} }		
5	47	42	♂ in horario.		
	51	4	Stella prior in h. auſtralior ♂	18	17
6	2	59	Stella poſterior in h. auſtralior	15	41
	7	22	Cornu auſtr. ☾^{æ} } & limb. auſtrin. ☾^{æ} auſtr. ♂	6	20.
	8	31	Limb. ort. ☾^{æ} }		

Tum capta Diam. ☾^{æ} 30′ 43″. Mora in horario 2′ 17″; ☾^{æ} tum alta 23½°.

April. 11 veſpere cum elapſis diebus cœlum non faveret, comparati ♃ & ♀

7^h 6′ 33″ ♃ in hor.
7 18 ♀ in h. borealior ♃ 55′ 7″
7 9 49 ♃ in hor.
10 35 ♀ in h. borealior ♃ 55′ 7″
7 12 18 ♃ in hor.
13 5 ♀ in h. borealior ♃ 55′ 11″

7^h 14′ 47″ ♃ in hor.
15 34 ♀ in h. borealior ♃ 55′ 11″
7 16 56 ♃ in hor.
17 43½ ♀ in h. borealior ♃ 55′ 15″.

April. 27 veſpere, cum ☾^{æ} occultatura eſſet ♀^{rem}, comparatæ inter ſe & cum ſtella A ♉.

7^{h}	17′	49″	St. A in horario.		
	21	21	Limb. occid. ☾^{æ} in h. & auſtrin. auſtr. ſtellâ	41′	42″
	25	54	♀ in h. auſtralior ſtellâ	11	31
7	29	36	St. A in horario.		
	33	34	Limb. occid. ☾^{æ} in h. & auſtrin. auſtr. ſtellâ	41	34
	37	49	♀ in h. auſtralior ſtellâ	11	19
7	47	29	St. A in horario.		
	52	26	Limb. occid. ☾^{æ} in h. & auſtrin. auſtr. ſtellâ	41	33
	55	41	♀ in h. auſtralior ſtellâ	11	14.
			Poſtea ☾^{æ} ad occaſum properante aliud obtinere non potui, niſi		
8	10	10	Diſtantiam ♀^{ris} a limbo remotiore ☾^{æ}	40′	9″
8	25	54	♀ lumen hebeſcebat, &		
	26	10	♀ diſparuit tota. Neque momenta Immerſionis diſtingui melius potuerunt, ☾^{æ} horizonti proxima, & tenuibus etiam vaporibus obſeſſa. Diameter item ☾^{æ} capi non potuit, cornibus nondum formatis, utpote 2da die a ☌. Vidi hanc Immerſionem tubo 2 tantum pedum, quia ob ☾^{æ} profunditatem, & incommodum loci, quem propter penduli viciniam mutare nolui, alium applicare non potui; vidi tamen eodem ſecundo temporis, quo ſocius tubo 8 pedum.		

Jun. 9 cum Declinationes ⊙^{lis} & ♀^{ris} jam parum differrent, eos ſic comparare cœpi: mane

6^{h} 28′ 53″ ⊙ limb. ort. in h.
9 1 12 ♀ in h. boreal. limb. auſtrin. ⊙ 48′ 31″

9^{h} 11′ 43″ ⊙ limb. ort. in h.
11 44 10 ♀ in h. bor. limb. auſtrin ⊙ 47′ 13″.

Tum a meridie

3^h 23′ 45″ ⊙ limb. ort. in h.
5 56 16 ♀ in h. bor. limbo auſtrin. ⊙ 42′ 36″
6 1 49 ⊙ limb. ort. in h.
8 34 34 ♀ in h. bor. limbo auſtrin. ⊙ 40′ 57″.

Jun. 10 mane

7^h 42′ 44″ ⊙ limb. ort. in h.
10 16 34½ ♀ in h. bor. limbo auſtrin. ⊙ 30′ 36″.

Jun. 11 mane

6^h 32′ 8″ ⊙ limb. ort. in h.
9 6 16 ♀ in h. bor. limbo auſtrin. ⊙ 14′ 48″
9 14 26 ⊙ limb. ort. in h.
11 48 42 ♀ in h. bor. limbo auſtrin. ⊙ 13′ 10″.

Et a merid.

2 37 24 ⊙ limb. ort. in h.
5 11 42 ♀ in h. bor. limbo auſtrin. ⊙ 8′ 17″
5 17 8 ⊙ limb. ort. in h.
7 51 37 ♀ in h. bor. limbo auſtrin. ⊙ 7′ 11″.

Eodem veſp. comparata ♀ cum ſtella μ in conſtellatione Cancri

8^h 8′ 8″ ♀ in horario.
43 St. μ in h. auſtr. ♀ 40′ 26″
8 14 14 ♀ in horario.
47 St. μ in h. auſtr. ♀ 40′ 26″.

Jun. 12 mane

6^h 25′ 51″ ⊙ limb. ort. in h.
9 0 50 ♀ in h. auſtr. limbo boreo ⊙ 33′ 52″
9 17 16 ⊙ limb. ort. in h.
11 52 24 ♀ in h. auſtr. limbo boreo ⊙ 35′ 51″.

Et poſt meridiem

2 41 36 ⊙ limb. ort. in h.
5 16 46 ♀ in h. auſtr. limbo boreo ⊙ 40′ 28″
5 25 9 ⊙ limb. ort. in h.
8 0 32 ♀ in h. auſtr. limbo boreo ⊙ 41′ 35″.

Erit autem in uſu harum Obſervationum opus ſelectu, quia aliquæ multum diſcordant.

Sept. 11 mae cœpi comparare ☾^{am} cum ♃^{re}, quem poſtridie occultatura erat, itaque die claro

8^h	16′	42″	Mac. in hor.
	17	16	L. ort. in hor.
9	7	45	♃ in h. bor. maculà 48′ 41″
9	19	26	Mac. in hor.
10	8	8	♃ in h. bor. maculà 48′ 37″
10	11	53	Mac. in hor.
	58	33	♃ in h. bor. maculà 48′ 26″.

Atqui neque ſitum maculæ ad limbum, neque Diametrum ☾^{æ} capere licuit; ille igitur ex doctrina Librationis ☾^{æ}, hæc ex Ephemeridibus petendæ erunt. Macula erat Ariſtarchus. Sequenti die

Sept. 12 mane mox a media nocte cœpi comparare ☾^{am} cum ♃ ab illa tegendo. Uſus ſum teleſcopio 8 pedum & macula, quæ heri, Ariſtarchus:

0^h	5′	37″	Mac. in hor.
	10	50	♃ in h. bor. maculà 0′ 18″
0	14	34	Mac. in hor.
	19	25	♃ in h. bor. maculà 0′ 40″
0	21	32	Mac. in hor.
	26	7	♃ in h. bor. maculà 1′ 22″
0	27	57	Mac. in hor.
	32	18	♃ in h. bor. maculà 2′ 3″
0	36	16	Mac. in hor.
	40	17	♃ in h. bor. maculà 3′ 0″
0	41	49	Mac. in hor.
	45	39	♃ in h. bor. maculà 3′ 34″
0	47	37	Mac. in hor.
	51	14	♃ in h. bor. maculà 4′ 10″
1	2	33	Mac. in hor.
	5	38	♃ in h. bor. maculà 5′ 42″
1	7	9	Mac. in hor.
	10	3	♃ in h. bor. maculà 6′ 11″.

1^{h} 14′ 47″ Mac. in hor.
17 25 ♃ in h. bor. maculâ
6′ 45″
1 19 18 Mac. in hor.
21 47 ♃ in h. bor. maculâ
7′ 10″
1 24 51 Mac. in hor.
27 8 ♃ in h. bor. maculâ
7′ 51″
1 33 42 Mac. in hor.
35 40 ♃ in h. bor. maculâ
8′ 41″
1 37 50 Mac. in hor.
39 40 ♃ in h. bor. maculâ
9′ 3″
1 40 52 Mac. in hor.
42 36 ♃ in h. bor. maculâ
9′ 19″
1 50 17 Mac. in hor.
51 41 ♃ in h. bor. maculâ
10′ 23″
1 56 42 Mac. in hor.
57 53 ♃ in h. bor. maculâ
10′ 47″
1 59 44 Mac. in hor.
2 0 49 ♃ in h. bor. maculâ
11′ 7″
2 2 50 Mac. in hor.
3 50 ♃ in h. bor. maculâ
11′ 15″

2^{h} 9′ 54″ Mac. in hor.
10 40 ♃ in h. bor. maculâ
12′ 1″
2 14 34 Mac. in hor.
15 11 ♃ in h. bor. maculâ
12′ 20″
2 20 15 ♃ cœp. mergi } tubo
21 41 ♃ merſus tot. } 14p.
Mora Immerſionis 1′ 26″
capta illico Diameter ☾ᵉ 33′ 5″.
Mora in h. 2′ 26″. Macula occidentalior limbo ortivo ☾ᵉ 0′ 27½″ pend. & auſtralior limbo boreo 8′ 19″.
3^{h} 27′ 29″ ♃ cœp. emerg. } tub.
29 11 ♃ emerſit tot. } 13p.
1′ 42″ Mora Emerſionis
3 32 31 ♃ in hor.
34 23 Mac. in h. boreal. ♃
18′ 14″
3 37 3 ♃ in hor.
39 4 Mac. in h. boreal. ♃
18′ 36″
3 43 10 ♃ in hor.
45 22 Mac. in h. boreal. ♃
18′ 58″
3 47 20 ♃ in hor.
49 40 Mac. in h. boreal. ♃
19′ 11″.

3^h 51′ 28″ ♃ in hor.
53 55 Mac. in h. boreal. ♃ 19′ 30″
3 56 21½ ♃ in hor.
58 57½ Mac. in h. boreal ♃ 19′ 44″
4 0 50 ♃ in hor.
3 34 Mac. in h. boreal. ♃ 19′ 57″
4 6 0 ♃ in hor.
8 53 Mac. in h. boreal. ♃ 20′ 16″
4 11 46 ♃ in hor.
14 50 Mac. in h. boreal. ♃ 20′ 34″
4 28 11 ♃ in hor.
31 44 Mac. in h. boreal. ♃ 21′ 23″
4 36 31 ♃ in hor.
40 18 Mac. in h. boreal. ♃ 21′ 45″
4 43 37 ♃ in hor.
47 37 Mac. in h. boreal. ♃ 22′ 3″
5 0 9 ♃ in hor.
4 36 Mac. in h. boreal. ♃ 22′ 47″
5 9 27 ♃ in hor.
14 11 Mac. in h. boreal. ♃ 23′ 0″
5^h 17′ 15″ ♃ in hor.
22 13 Mac. in h. boreal. ♃ 23′ 12″
5 24 5 ♃ in hor.
29 15 Mac. in h. boreal. ♃ 23′ 23″.

Cum ☾^{a} & ♃ in Meridiano eſſent valde alti, & Obſervatio non ſolum parum commoda eſſet, ſed etiam minus tuta, expectavi dum Meridianum tranſgreſſi paullum deſcendiſſent. Tum vero porro

8^h 8′ 1″ ♃ in hor.
18 12 Mac. in h. boreal. ♃ 22′ 14″.
8 21 4 ♃ in hor.
31 40 Mac. in h. boreal. ♃ 21′ 50″
8 35 35 ♃ in hor.
46 39 Mac. in h. boreal. ♃ 21′ 25″
8 57 29 ♃ in hor.
9 9 20 Mac. in h. boreal. ♃ 20′ 31″
9 11 6 ♃ in hor.
23 25 Mac. in h. boreal. ♃ 19′ 57″.

9ʰ 28′ 22″ ♃ in hor.
41 19 Mac. in h. boreal. ♃ 19′ 13″
9 44 29 ♃ in hor.
58 2 Mac. in h. boreal. ♃ 18′ 20″

10ʰ 0′ 1″ ♃ in hor.
14 9 Mac. in h. bor. ♃ 17′ 28″.
Eſt autem notabilis luſus parallaxeos in Declinatione.

Nov. 5 mane cum futura eſſet hoc die ☌ ☾ᵉ cum ♃ᵛᵉ, obſervatum fuit præciſe

5ʰ 10′ 42″ Mac. in hor.
44 33 ♃ in h. bor. maculâ 35′ 23″.
Hic capta Diam. ☾ᵉ 33′ 59½″. Mora in h. 2′ 30″, ☾ᵉ tum alta 29°. Macula occidentalior limbo ort. 0′ 32″ pend. & auſtralior boreo 7′ 52″.
6ʰ 6′ 59″ Mac. in hor.
38 39 ♃ in h. bor. maculâ 35′ 6″
6 40 53 Mac. in hor.
7 11 8 ♃ in h. bor. maculâ 34′ 56″.

7ʰ 53′ 38″ ♃ in hor.
8 6 53 L. ort. ☾ᵉ in h. & b. boreal. ♃ 7′ 54″
8 15 29 ♃ in hor.
29 43 L. ort. ☾ᵉ in h. & b. boreal. ♃ 10′ 7″
8 34 22 ♃ in hor.
49 28 L. ort. ☾ᵉ in h. & b. boreal. ♃ 12′ 7″
8 52 43 ♃ in hor.
9 8 36 L. ort. ☾ᵉ in h. & b. boreal. ♃ 13′ 51″
9 10 56 ♃ in hor.
27 36 L. ort. ☾ᵉ in h. & b. boreal. ♃ 15′ 45″
9 30 56 ♃ in hor.
28 26 L. ort. ☾ᵉ in h. & b. boreal. ♃ vacat.
Hic capta Diam. ☾ᵉ 33′ 49″. Mora in h. 2′ 29½″; ☾ᵉ alta 34°.

Nov. 5 veſpere poſt ☌
7ʰ 38′ 15″ ♃ in hor.
50 45 L. ort. ☾ᵉ in h. & bor. boreal. ♃ 6′ 16″

10^h 2′ 36″ Immerſit 3^{tius} Satel. ♃^{ii} in umbram ♃^{vis}.

10 10 0 ♃ in hor.

29 2 L. ort. ☾^{ae} in h. & b. boreal. ♃ 21′ 6″.

Nov. 6 mane comparata iterum ☾^{a} cum ♃^{ve}, & ambo cum ſtella ι ♉ prope cornu auſtrinum Tauri

5^h 27′ 59″ ♃ in hor.

44 35 St. in h. borealior ♃ 11′ 8″

6^h 1′ 58″ L. ort. ☾^{ae} in h. & b. boreal. ♃ 26′ 36″

6 3 39 ♃ in hor.

20 17 St. in h. borealior ♃ 11′ 25″

39 1 L. ort. ☾^{ae} in h. & b. boreal. ♃ 24′ 25″. Obſerv. tutior priore.

6 41 36 ♃ in hor.

7 18 33 L. ort. ☾^{ae} in h. & b. boreal. ♃ 21′ 54″.

Diameter ☾^{ae} 33′ 31″.

Mora in h. 2′ 27″, ☾^{a} tum alta 26°.

Nov. 16 mane cum intereſſet ſcire, an diſtantia ♀^{ris} a centro ☾^{ae} in ☌ non eſſet major, quam 47′, obſervatæ ſunt ſequentes diſtantiæ teleſcopio 3 pedum.

6^h	15′	54″	♀ diſt. a limb. propiore obſc. ☾^{ae} bene viſo	1° 16′ 43″
	22	37	— — — —	1 18 8
	30	17	— — — —	1 19 4.

Diameter capi non potuit: factum, quantum tum ſatis.

Dec. 2 veſpere cum nocte ſequente imminerent, & occultatio ♃^{vis} a ☾^{a}, & hujus Eclipſis, pendulum ita compoſui, ut h. 4 matutina diei ſequentis 3 Dec. indicaret præciſe tem-

tempus verum, cumque differentia æquationum his diebus eſſet 24″. Singulis Obſervationum momentis ante 4^h mat. 3 Dec. addendum erit 1″, & poſt demendum. Igitur Dec. 2 veſp.

5^h	8′	45″	Mac. in hor.
	19	51	♃ in h. bor. maculâ 11′ 56″
5	23	49	Mac. in hor.
	34	13	♃ in h. bor. maculâ 9′ 54″
5	37	5	Mac. in hor.
	46	52	♃ in h. bor. maculâ 7′ 36″
5	49	0	Mac. in hor.
	58	14	♃ in h. bor. maculâ 6′ 43″
6	0	2	Mac. in hor.
	8	47	♃ in h. bor. macula 5′ 16″
6	12	41	Mac. in hor.
	20	53	♃ in h. bor. maculâ 3′ 19″
6	22	15	Mac. in hor.
	30	2	♃ in h. bor. maculâ 1′ 58″
6	31	40	Mac. in hor.
	39	4	♃ in h. bor. maculâ 0′ 48″

6^h	42′	52″	Mac. in hor.
	49	46	♃ in h. auſtr. maculâ 0′ 36″
6	53	26	Mac. in hor.
	59	53½	♃ in h. auſtr. maculâ 2′ 9″
7	30	29	Mac. in hor.
	35	31	♃ in h. auſtr. maculâ 6′ 47″
7	37	11	Mac. in hor.
	41	56	♃ in h. auſtr. maculâ 7′ 32″
7	48	29	Mac. in hor.
	52	49	♃ in h. auſtr. maculâ 8′ 57″
7	56	29	Mac. in hor.
8	0	28	♃ in h. auſtr. maculâ 10′ 7″.

Hic capta Diam. ☾ᵃ 34′ 23″. Mora in h. 2′ 32″, ☾ᵃ tum alta 42°; atqui moram obtinui infra aliquoties minorem. Macula borealior limbo auſtrino ☾ᵃ 26′ 18″, & orientalior occiduo 2′ 0″.

8^h 27′ 22″ Mac. in hor.
30 14 ♃ in h. auſtr. maculâ 13′ 18″

8 56 11 Mac. in hor.
58 2 ♃ in h. auſtr. maculâ 16′ 41″

9 1 13 Mac. in hor.
2 54 ♃ in h. auſtr. maculâ 17′ 1″

9 6 19 Mac. in hor.
7 49 ♃ in h. auſtr. maculâ 17′ 49″

9 13 6½ Mac. in hor.
14 21 ♃ in h. auſtr. maculâ 18′ 21″

9 16 57 Mac. in hor.
18 5 ♃ in h. auſtr. maculâ 18′ 39″

9 22 20 Mac. in hor.
23 16 ♃ in h. auſtr. maculâ 19′ 21″

9 26 57 Mac. in hor.
27 45 ♃ in h. auſtr. maculâ 19′ 48″

9 31 17 Mac. in hor.
54 ♃ in h. auſtr. maculâ 20′ 9″

6 37 9 Mac. in hor.
35 ♃ in h. auſtr. maculâ 20′ 44″

9^h 45′ 13″ ♃ cœpit mergi
47 48 ♃ merſus totus.
2 35 Mora Immerſionis.

10 24 4 ♃ cœpit emergere.
26 40 ♃ emerſit totus, niſi fors citius 2″ vel 3″ cœp. emergere.

10 32 56 ♃ in hor.
34 22½ M. in h. boreal. ♃ 25′ 27″

10 41 51 ♃ in hor.
43 37 M. in h. boreal. ♃ 26′ 18″.

Decurrit ſcilicet in hac operatione limbus auſtrinus ☾ᵃ præciſe idem filum parallelum fixum, quod decurrebat ♃. Unde ſit macula borealior limbo auſtrino 26′ 18″, ut antea obſervatum.

10^h 55′ 35″ ♃ in hor.
57 47 M. in h. boreal. ♃ 27′ 12″

11 13 57½ ♃ in hor.
14 46 L. occ. ☾ᵃ in hor.
16 46 M. in h. 28′ 20″

11 24 29 ♃ in hor.
27 42 L. occ. ☾ᵃ in hor.
29 42 M. in h. 29′ 2″.

11ʰ 36′ 14″ ♃ in hor.
39 46 M. in h. boreal. ♃ 29′ 40″.

Dec. 3 mane poſt med. noct.
2ʰ 12′ 26″ ♃ in hor.
19 12 L. occ. ☾* in h.
21 12 M. in h. b. ♃ 33′ 23″
2 25 3 ♃ in hor.
32 18 L. occ. ☾* in hor.
34 18 M. in h. b. ♃ 33′ 23″
2 40 39 ♃ in hor.
48 28 L. occ. ☾* in hor.
50 28 M. in h. b. ♃ 33′ 13″
2 55 30 ♃ in hor.
3 3 51 L. occ. ☾* in hor.
5 51 M. in h. b. ♃ 33′ 12″
6 23 L. ort. ☾*.
3 8 58 ♃ in hor.
17 51 L. occ.
20 22 L. ort.
19 6½ } Et limb. boreus boreal. ♃ 41′ 12″
3 27 18 ♃ in hor.
36 53 L. occ. ☾* in h.
39 24 L. ort. ☾* in h.
38 8½ } & limb. boreus boreal. ♃ 40′ 55″

3ʰ 43′ 29″ ♃ in hor.
53 44 L. occ. ☾* in h.
56 14 L. ort. ☾* in h.
54 59 } & limb. boreus boreal. ♃ 40′ 28″
3 59 21 ♃ in hor.
4 10 14 L. occ. ☾* in h.
Cætera negleсta animo & oculis in Eclipſim ☾* intentis.
4 31 5 ♃ in hor.
45 48 L. ort. in h. & boreus boreal. ♃ 40′ 9″
5 49 53 ♃ in hor.
6 7 44 M. in h. cætera vac.
6 17 30 ♃ in hor.
36 45 M. in h. borealior ♃ 26′ 4″.

Eclipſis ☾* habet alium locum, huic tamen etiam illigata. Igitur

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Dec. 3 mane Eclipſis ☾*; atqui initium non vidi.
4ʰ 4′ 30″ Umbra ad Ariſtarch.
7 17 — Ricciol.
8 39 — Grimald.
12 14 Grimald. latet totus.
15 12 Pars luc. ☾* 25′ 26″.

4^h	17′	36″	Pars luc. ☾æ	24′	37″
	20	15	—	23	1
	23	53	—	21	33
	27	8	—	20	30
	36	2	Umb. ad Menelaum.		
	37	39	Menelaus latet tot.		
	40	16	Umbr. ad Soſigenem.		
	41	23	Plato latet totus.		
	48	46	Pars luc. ☾æ	12′	33″
	51	37	—	11	43
5	0	9	—	9	54
	3	27	—	9	37
	8	40	—	8	36
	12	41	Chorda cornuum	32′	10″
	15	40	Pars luc. ☾æ	8	30
	17	59	—	8	30
	20	37	—	8	11
	24	11	Chorda c.	31	34
	26	52	Pars luc. ☾æ	7	57
	34	11	—	8	20
	38	0	—	8	34
	43	42	—	9	47
6	7	59	Ariſtarchus emergit.		
	10	40	Pars luc. ☾æ	17′	19″
	15	20	—	18	27
	46	0	Finis; ſed parum certus.		

Tota Obſervatio facta tubo ordinario 6 pedum.

Dec. 29 veſpere cum poſtridie immineret ☌ ☾æ cum ♃ve obſervatum

4^h	29′	22″	Mac. in hor.
	57	29	♃ in h. bor. maculâ 31′ 11″
4	59	14	Mac. in hor.
5	26	13	♃ in h. bor. maculâ 26′ 33″
5	28	12	Mac. in hor.
	54	9	♃ in h. bor. maculâ 22′ 21″
5	56	28	Mac. in hor.
6	21	26	♃ in h. bor. maculâ 18′ 9″
11^h	58′	21″	Mac. in h. & poſt med. noct.

Dec. 30 mane

0^h	12′	1″	♃ in h. jam auſtralior maculâ 13′ 53″
1	40	27	Mac. in hor.
	50	29	♃ in h. jam auſtralior maculâ 15′ 53″
2	2	59	Mac. in hor.
	12	20	♃ in h. jam auſtralior maculâ 15′ 47″.

2^h 14′ 8″ Mac. in hor.
22 50 ♃ in h. jam auſtralior maculà 16′ 1″
2 24 54 Mac. in hor.
33 12 ♃ in h. jam auſtralior maculà 16′ 1″.
Hic capta Diam. ☾ᵉ 33′ 43″. Mora in h. 2′ 29″, ☾ᵉ alta 20°. Macula orientalior limbo occiduo ☾ᵉ 1′ 53″, & borealior limbo auſtrino 25′.43″.
3^h 0′. 54″ Mac. in hor.
7 39 ♃ in h. jam auſtralior maculà 16′. 16″
3 12 9 Mac. in hor.
18 28 ♃ in h. jam auſtralior maculà 16′. 6″

3^h 36′ 48″ Mac. in hor.
41 59 ♃ in h. jam auſtralior maculà 16′ 18″
3 43 35 Mac. in hor.
48 30 ♃ in h. jam auſtralior maculà 15′ 49″
3 51 30 Mac. in hor.
56 2½ ♃ in h. jam auſtralior maculà 15′ 51″
3 57 37 Mac. in hor.
4 1 52 ♃ in h. jam auſtralior maculà 15′ 51″.
In Ephemeridibus Pariſinis notatur Immerſio ♃vis poſt ☾nam Dec. 29 8^h 7′, hoc eſt, Pekini Dec. 30 3′. 43″ mane.

Anno 1752.

Jan. 26 veſpere comparata ☾ᵃ cum ♃ᵛᵉ breviter.

2^h 58′ 46″ ♃ in horario.
3 11 44 Limb. occ. ☾ᵃ in h. & limb. auſtral. boreal. ♃ 9′ 31″
3 20 21 ♃ in horario.
34 8 Limb. occ. ☾ᵃ in h. & limb. auſtral. boreal. ♃ 12 18
3 39 4 ♃ in horario.
53 33 Limb. occ. ☾ᵃ in h. & limb. auſtral. boreal. ♃ 14 18
3 56 12 ♃ in horario.
4 11 16 Limb. occ. ☾ᵃ in h. & limb. auſtral. boreal. ♃ 16 18.

4h 15′ 37″ ♃ in horario.
31 23 Limb. occ. ☾æ in h. & limb. auſtral. boreal. 18′ 22″.
Diam. ☾æ 33′ 19″. Mora in h. 2′ 26″, ☾æ alta 47°.

Febr. 21 veſpere comparata ☾æ cum ♂tis, quem interdiu texerat.

7h 36′ 26″ ♂ in hor.
52 7 L. occ. in h. & auſtr. boreal. ♂ 22′ 2″
7 54 16 ♂ in hor.
8 10 29 L. occ. in h. & auſtr. boreal. ♂ 23′ 26″
8 15 40 ♂ in hor.
32 35 L. occ. in h. & auſtr. boreal. ♂ 24′ 29″
8 34 59 ♂ in hor.
52 31 L. occ. in h. & auſtr. boreal. ♂ 25′ 32″.
Diam. ☾æ 32′ 45″. Mora in h. 2′ 21″, ☾æ alta 33°.
9h 6′ 59″ ♂ in hor.
25 36 L. occ. in h. & auſtr. boreal. ♂ 27′ 8″
9 28 4 ♂ in hor.
27 26 L. occ. in h. & auſtr. boreal. ♂ 27′ 50″
9 50 43 ♂ in hor.
10 10 56 L. occ. in h. & auſtr. boreal. ♂ 29′ 1″.

Febr. 22 veſpere comparata ☾æ cum ♃ve, quem etiam occultavit.

4h 59′ 26″ Mac. in hor.
5 3 27 ♃ in h. bor. maculâ 21′ 28″
5 8 45 Mac. in hor.
12 32 ♃ in h. bor. maculâ 20′ 52″
5 14 55 Mac. in hor.
18 32 ♃ in h. bor. maculâ 20′ 16″
5 24 0 ♃ diſt. a limbo remotiore ☾æ 59′ 38″
5 33 16 ♃ diſt. ab eodem 56′ 38″
5 39 59 Mac. in hor.
42 54 ♃ in h. bor. maculâ 18′ 45″
5 54 46 ♃ diſt. a limbo remotiore ☾æ 48′ 20″
6 14 30 ☾æ texit ſtellam ω 2 ♉.

6^{h}	19′	53″	☾^{æ} texit 4^{tum} Satellitem ♃^{vis}.
6	35	49	♃ cœpit mergi.
	37	38	♃ merſus totus.
6	49	35	3^{tius} Sat. ♃^{vis} cœpit mergi.
		38	3^{tius} Sat. merſus tot. nempe ſenſim deficiente lumine, contra quam ſtellæ fixæ etiam 1^{mæ} magnitudinis.
			Initium Emerſionis ♃^{vis} non vidi, ubi enim acceſſi, jam medius prodiverat, & inde, uſque dum totus exiret, numeravi 50″.
7	44	33	♃ emerſit totus.
8	25	22	♃ in horario.
	26	31	Limb. occ. ☾^{æ} in hor.
	27	31	Cornu boreum in h.
		56	Cornu auſtr. in hor. & limbus auſtrin. ☾^{æ} auſtral. ♃ 23′ 39″
8	39	19	Emerſit 2^{dus} Satelles ♃^{vis} ex umbr. ♃^{vis} viſus teleſcopio 13 pedum.

8^{h}	47′	29″	♃ in horario.
	49	21	Limb. occ. ☾^{æ} in h.
	50	20	Cornu boreum in h.
		46	Cornu auſtr. & limb. auſtr. ☾^{æ} auſtralior ♃ 32′ 22″
8	56	7	♃ in horario.
	58	16	Limb. occ. ☾^{æ} in h.
	59	14	Cornu boreum in h.
		39	Cornu auſtr. & limb. auſtr. ☾^{æ} auſtralior ♃ 23′ 18″
9	2	55	♃ in horario.
	5	17	Limb. occ. ☾^{æ} in h.
	6	16	Cornu boreum in h.
		43	Cornu auſtr & limb. auſtr. ☾^{æ} auſtralior ♃ 22′ 59″
9	11	21	♃ in horario.
	14	0	Limb. occ. & auſtrin. auſtral. ♃ 22′ 59″
		42½	Macula in h. boreal. limb. auſtrin. ☾^{æ} 10′ 24″, eſtque hæc ipſa macula, cum qua ſupra ante occultationem ♃ comparabatur.
			Capta hic etiam fuit Diam. ☾^{æ} 33′ 7″.

			Mora in h. 2′ 20″; ☾æ tum alta 40°.
9h	46′	16″	Stella ω 2 in hor.
		42½	♃ in h. boreal. ſtellâ 15′ 40″
9h	54′	33″	♃ in horario.
	58	44	Limb. occ. ☾æ in h.
	59	43	Corn. boreum in h.
10	0	10	Corn. auſtr. & limb. auſtr. ☾æ auſtral. ♃ 22′ 54″
10	6	6	♃ in horario.
	10	42	Limb. occ. ☾æ in h.
	11	42	Corn. boreum in h.
	12	8	Corn. auſtr. & limb. auſtr. ☾æ auſtral. ♃ 23′ 22″
10	15	21	♃ in horario.
	20	19	Limb. occ. ☾æ in h.
	21	18	Corn. boreum in h.
		44	Corn. auſtr. & limb. auſtr. ☾æ auſtral. ♃ 22′ 57″
10	23	29	♃ in horario.
	28	44	Limb. occ. ☾æ in h.
	29	44	Corn. boreum in h.
	30	9	Corn. auſtr. & limb. auſtr. ☾æ auſtral. ♃ 23′ 15″

10h	32′	29″	♃ in horario.
	38	6	Limb. occ. ☾æ in h.
	39	5	Corn. boreum in h.
		31	Corn. auſtr. & limb. auſtr. ☾æ auſtral. ♃ 23′ 15″
10	42	19	♃ in horario.
	48	19	Limb. occ. ☾æ in h.
	49	19	Corn. boreum in h.
		44	Corn. auſtr. & limb. auſtr. ☾æ auſtral. ♃ 23′ 15″
10	52	3	♃ in horario.
	58	27	Limb. occ. ☾æ in h.
	59	26	Corn. boreum in h.
		52	Corn. auſtr. & limb. auſtr. ☾æ auſtral. ♃ 23′ 15″
11	1	41	♃ in horario.
	8	27	Limb. occ. ☾æ in h.
	9	9	Mac. in h. & limb. auſtr. ☾æ auſtral. ♃ 23′ 21″
11	11	4	♃ in horario.
	18	25	Limb. occ. ☾æ in h.
	19	7½	Mac. in h. & limb. auſtr. ☾æ auſtral. ♃ 23′ 17″.

$11^h\ 30'\ 10''$ ♃ in hor.
38 7 Limb. occ. ☾ª in h.
49 Mac. in h. & limb. auſtr. ☾ª auſtral. ♃ 24′ 5″

11 41 33 ♃ in hor.
50 0 Limb. occ. ☾ª in h.
42 Mac. in h. & limb. auſtr. ☾ª auſtral. ♃ 24′ 5″

$11^h\ 52'\ 34''$ ♃ in h. & poſt m. n.
0 1 30 Limb. occ. ☾ª in h. & limb. auſtr. ☾ª auſtral. ♃ 24′ 7″
0 5 15 ♃ in hor.
14 43 L. occ. ☾ª in h. & limb. auſtr. ☾ª auſtral. ♃ 24′ 23″.

Vereor autem, ne poſtremæ hæ differentiæ declinationum vitii aliquid habeant.

Quod ad tempora attinet, ea vera ſunt & correcta.

Si tamen ab h. 6 ad h. 9 ubique auferas 5″, & ab h. 9 ad 12 ubique 4″, fient exactiſſima.

Momenta Immerſionum & Emerſionum in Eccleſia orientali S. Joſephi obſervavit P. Joſephus Eſpinha.

$6^h\ 14'\ 36''$ ☾ª obtexit ſtellam ω 2 in Tauro
35 54 ♃ cœpit ſubire diſcum ☾ª.
37 42 ♃ totus immerſus eſt.
40 53 Obtectus eſt a ☾ª proximus Satelles.
45 48 — — — alter Satelles.
7 43 4 ♃ cœpit emergere.
44 36 ♃ emerſit totus.

April. 5 mane ☾ª cum ♄no
$3^h\ 38'\ 30''$ Mac. in hor.
40 1 Limbus ort. ☾ª in h.
47 38 ♄ in h. auſtr. maculâ 15′ 53″

$3^h\ 49'\ 16''$ Mac. in hor.
58 10 ♄ in h. auſtr. maculâ 15′ 45″.

4^h	0′	46″	Mac. in hor.
	9	24	♄ in h. auſtr. maculà
			15′ 36″
4	19	3	Mac. in hor.
	20	35	Limbus ort. ☾^{ae} in h.
	27	18	♄ in h. auſtr. maculà
			15′ 36″
4	29	45½	Mac. in hor.
	31	18	Limbus ort. ☾^{ae} in h.
	37	45	♄ in h. auſtr. maculà
			15′ 47″
4^h	47′	52″	Mac. in hor.
	49	24	Limbus ort. ☾^{ae} in h.
	55	27	♄ in h. auſtr. maculà
			16′ 1″
5	0	16	Mac. in hor.
	1	49	Limbus ort. ☾^{ae} in h.
	7	35	♄ in h. auſtr. maculà
			16′ 22″
5	8	52	Mac. in hor.
	10	23	Limbus ort. ☾^{ae} in h.
	14	58	♄ in h. auſtr. maculà
			16′ 33″.

Igitur macula occidentalior limbo ortivo ☾^{ae} 1′ 32″ pend. eſt item borealior limbo auſtrino 9′ 26″.

4 12 0 capta fuit Diameter ☾^{ae} 30′ 7″. Mora in hor. 2′ 11″ pend. ☾^{ae} tum alta 28°.

Jun. 25 veſpere ☾^{ae} iterum cum ♄^{no}, quem etiam interdiu texerit.

8^h	0′	28″	♄ in hor.
	2	24	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 29′ 17″
8	4	55	♄ in hor.
	6	58	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 29′ 7″
8	8	53	♄ in hor.
	11	3	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 28′ 59″
8	12	29	♄ in hor.
	14	44	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 28′ 49″
8^h	16′	44″	♄ in hor.
	19	6	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 28′ 38″
8	23	2	♄ in hor.
	25	35	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 28′ 28″
8	27	58	♄ in hor.
	30	37	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 28′ 18″
8	33	7	♄ in hor.
	35	55	L. occ. ☾^{ae} in h. & b.
			boreal. ♄ 28′ 7″.

8h 37′ 44″ ♄ in hor.	9h 2′ 29″ ♄ in hor.
40 40 L. occ. ☾ª in h. & b. boreal. ♄ 28′ 2″	6 2 L. occ. ☾ª in h. & b. boreal. ♄ 27′ 21″
8 45 16 ♄ in hor.	9 7 27 ♄ in hor.
48 23 L. occ. ☾ª in h. & b. boreal. ♄ 27′ 49″	11 8 L. occ. ☾ª in h. & b. boreal. ♄ 27′ 10″. Hic capta Diam. ☾ª 29′ 44″. Mora in h. 2′ 10″, ☾ª alta 24½°.
8 50 33 ♄ in hor.	
53 47 L. occ. ☾ª in h. & b. boreal. ♄ 27′ 40″	
8 56 27 ♄ in hor.	9 26 2 ♄ in hor.
59 51 L. occ. ☾ª in h. & b. boreal. ♄ 27′ 30″	30 9 L. occ. ☾ª in h. & b. boreal. ♄ 26′ 49″.

Jul. 21 veſpere ☾ª texit ♄um, qua occaſione factæ Obſervationes ſequentes: ac primum

5h 55′ 27″ } Arcturus in Culminatorii filo 1°
56 20 } 2° tum in Micrometro.
57 13 } 3°

7 12 58 Mac. in hor.	7 20 55½ Mac. in hor.
17 48 ♄ in h. auſtr. maculâ 15′ 59″	25 33 ♄ in h. auſtr. maculâ 15′ 55″.

8 5 1 } Cor Scorpii in Culminatorii filo 1°
56½ } 2° tum in Micromet.
6 51 } 3°

8h 14′ 26″ Mac. in hor.	8h 25′ 19″ Mac. in hor.
17 50 ♄ in h. auſtr. maculâ 14′ 31″	28 27 ♄ in h. auſtr. maculâ 14′ 16″
8 20 35 Mac. in hor.	8 43 39 Mac. in hor.
23 50 ♄ in h. auſtr. maculâ 14′ 18″	46 23 ♄ in h. auſtr. maculâ 14′ 5″.

$8^h\ 59'\ 20''$ }
9 0 15 } Limbus occiduus ☾^{ae} in Culminatorii filo { 1° 2° 3°
1 9 }

9 1 46 Macula in Meridiano.

9 3 12½ }
4 5½ } ♄ in Culminatorii filo — — { 1° 2° 3°
59 }

9 31 15 Mac. in hor.	$9^h\ 35'\ 47''$ Mac. in hor.
32 55 ♄ in h. auſtr. maculâ	37 21 ♄ in h. auſtr. maculâ
$13'\ 58''$	$13'\ 58''$.

Hic numerata in Micrometro a limbo occiduo ☾^{ae} ad maculam $1'\ 30''$ penduli, cum in Culminatorio numerata fuiſſent $1'\ 31''$. Eſt autem etiam Macula hæc borealior limbo auſtrino ☾^{ae} $17'\ 19''$, Diam. ☾^{ae} $29'\ 57''$. Mora in h. $2'\ 11''$, ☾^{ae} alta 28°. Poſtea nubibus ſe cœlo intendentibus nihil de Immerſione ♄^{ni} videri potuit. Sed

$10^h\ 18'\ 44''$ }
19 47 } Lyra in Culminatorii filo { 1° 2° 3°
20 50 }

10 46 0 Per parvum hiatum nubis viſa ☾^{a} ſine ♄^{no}.
Iterum dehiſcentibus nubibus acceſſi, & vidi ♄^{num} actu emergentem, ita ut

11 17 54 Eſſet proxime medius emerſus. Poſt autem

11 28 40 ♄ in hor.	Erat nempe limbus auſtr. ☾^{ae} in parallelo ♄^{ni}.
29 57 M. in h. boreal. ♄ $16'\ 50''$	$11^h\ 54'\ 32''$ ♄ in hor.
11 36 19 ♄ in hor.	56 21 M. in h. boreal. ♄ $17'\ 46''$.
37 38 M. in h. boreal. ♄ $17'\ 1''$	Et poſt med. noct.
11 40 52 ♄ in hor.	
42 19 M. in h. boreal. ♄ $17'\ 18''$.	

Jul. 22 mane
0ʰ 0′ 18″ ♄ in hor.
2 17 M. in h. borealior ♄ 18′ 15″

0ʰ 8′ 8″ ♄ in hor.
10 19 M. in h. borealior ♄ 18′ 32″.
Tempora omnia correcta.

CAPUT IV.

CONGRESSUS PLANETARUM MINORUM CUM STELLIS FIXIS.

§. I.

SATURNUS CUM FIXIS.

Anno 1746.

Nov. 25 mane cœpi comparare ♄ⁿᵘᵐ cum ſtella *m* in ♍, ſcilicet inter h. 5 32′ & h. 6 repetitis vicibus erat ♄ occidentalior ſtella *m* 1′ 19″ penduli, eademque borealior 46′ 15″, diſtantia eorundem erat 51′ 32″.

Nov. 26 mane circa h. 6 30′ ex repetitis operationibus erat ♄ occidentalior ſtella *m* 0′ 57″ penduli, idemque eadem borealior 43′ 59″, diſtantia eorundem 45′ 56″.

Nov. 28 mane
5^h 20′ 49″ ♄ in hor.
21 1 St. *m* in h. auſtral. ♄ 39′ 51″
5 39 30 ♄ diſt. a St. 40′ 10″.

Nov. 29 mane
5^h 42′ 0″ ♄ diſt. a St. 37′ 43″.
Eratque ♄ orientalior ſtella 0′ 11″, eaque borealior 37′ 26″.

Dec. 1 mane circa
5^h 55′ 0″ Ex repetitis Obſervationibus erat ♄ orientalior ſtellâ 0′ 58″, eaque borealior 33′ 29″.

5^h 16′ 31″ St. *m* in hor.
20 58 ♄ in h. boreal. ſtellâ 14′ 58″.

Dec. 2 mane
5^h 15′ 0″ St. *m* in hor.
16 23 ♄ in h. boreal. ſtellâ 31′ 38″
5 30 0 ♄ diſt. a St. 38′ 31″.

Dec. 11 mane
4^h 52′ 1″ St. *m* in hor.
56 29 ♄ in h. boreal. ſtellâ 14′ 57″
5 4 19 St. *m* in hor.
8 46 ♄ in h. boreal. ſtellâ 14′ 54″

Dec. 19 mane
4^h 45′ 24″ St. *m* in hor.
52 19 ♄ in h. boreal. ſtellâ 2′ 10″
4 54 54 St. *m* in hor.
5 1 51 ♄ in h. boreal. ſtellâ 2′ 10″.

Dec. 20 mane
3^h 56′ 23″ St. *m* in hor.
4 3 36 ♄ in h. boreal. ſtellâ 0′ 25″
4 8 5 St. *m* in hor.
15 18 ♄ in h. boreal. ſtellâ 0′ 29″.

4ʰ 19′ 21″ St. *m* in hor.
26 34 ♄ in h. boreal. ſtellâ
0′ 26″.

Dec. 21 mane
4ʰ 1′ 27″ St. *m* in hor.
8 56 ♄ in h. auſtral. ſtellâ
1′ 9″
4 16 28 St. *m* in hor.
23 58 ♄ in h. auſtral. ſtellâ
1′ 9″
4 31 22 St. *m* in hor.
38 51 ♄ in h. auſtral. ſtellâ
1′ 9″.

Dec. 22 mane
3ʰ 50′ 41″ St. *m* in hor.
58 26 ♄ in h. auſtral. ſtellâ
1′ 50″
4 4 22 St. *m* in hor.
17 7 ♄ in h. auſtral. ſtellâ
1′ 50″
4 22 17 St. *m* in hor.
30 3 ♄ in h. auſtral. ſtellâ
1′ 36″.

Anno 1747.

Obſervationes ♄ⁿⁱ cum hac ſtella *m* ♍ a 2 Jan. ad 11 Jan. vide in Congreſſibus Planetarum, ubi una comparabatur ♂; poſtea autem

Jan. 12 mane
2ʰ 29′ 25″ St. *m* in hor.
41 50 ♄ in h. auſtral. ſtellâ
23′ 18″ dub.
3 2 28 St. *m* in hor.
14 52 ♄ in h. auſtral. ſtellâ
22′ 29″ tutior.

Jan. 13 mane
2ʰ 30′ 29″ St. *m* in hor.
43 3 ♄ in h. auſtral. ſtellâ
24′ 4″
3 24 15 St. *m* in hor.
36 47 ♄ in h. auſtral. ſtellâ
24′ 4″.

Jan. 14 mane

5^h 1′ 38″ St. *m* in hor.
14 22 ♄ in h. auſtral. ſtellâ 24′ 25″
5 21 32 St. *m* in hor.
34 16 ♄ in h. auſtral. ſtellâ 24′ 21″.

Jan. 17 mane

6^h 13′ 30″ St. *m* in hor.
26 36 ♄ in h. auſtral. ſtellâ 26′ 41″.

Jan. 18 mane

1^h 55′ 50″ St. *m* in hor.
2 9 6 ♄ in h. auſtral. ſtellâ 26′ 29″
2 15 35 St. *m* in hor.
28 51 ♄ in h. auſtral. ſtellâ 26′ 29″.

Cum ſub initium Februarii ♄ futurus eſſet Stationarius, & a ſtella *m* ♍ jam longius abiret, comparare illum cœpi cum alia, quæ in Catalogo Britannico ponitur in ♎ 28° 25′ 25″ cum latit. borea 3° 19′ 59″ 6^{tæ} magnitudinis; vocetur ſtella *a*.

Jan. 26 mane

3^h 30′ 57″ St. *m* ♍ in hor.
44 58 ♄ in h. auſtral. ſtellâ 28′ 57″
4 5 15 ♄ in hor.
16 8 St. *a* in h. auſtral. ♄ 11′ 39″
4 22 14 ♄ in hor.
33 9 St. *a* in h. auſtral. ♄ 11′ 41″
4 38 41 ♄ in hor.
49 34 St. *a* in h. auſtral. ♄ 11′ 42″.

Jan. 27 mane

5^h 10′ 4″ ♄ in hor.
20 54 St. *a* in h. auſtral. ♄ 11′ 33″.
Poſtea nubes.

Jan. 28 mane

3^h 1′ 16″ ♄ in hor.
12 3 St. *a* in h. auſtral. ♄ 11′ 39″
3 16 50 ♄ in hor.
27 37 St. *a* in h. auſtral. ♄ 11′ 34″.

3^h

3^h 38′ 29″ ♄ in hor.
49 16 St. *a* in h. auſtral. ♄
11′ 58″ err.

Jan. 29 mane
4^h 44′ 7″ ♄ in hor.
54 52 St. *a* in h. auſtral. ♄
11′ 35″
4 58 45 ♄ in hor.
5 9 28 St. *a* in h. auſtral. ♄
11′ 35″
5 19 19 ♄ in hor.
29 53 St. *a* in h. auſtral. ♄
11′ 37″.

Jan. 30 mane
3^h 34′ 3″ ♄ in hor.
44 43 St. *a* in h. auſtral. ♄
11′ 29″
3^h 52′ 35″ ♄ in hor.
4 3 15 St. *a* in h. auſtral. ♄
11′ 29″
4 9 35 ♄ in hor.
20 15 St. *a* in h. auſtral. ♄
11′ 20″.

Jan. 31 mane
3^h 13′ 17½″ ♄ in hor.
23 56 St. *a* in h. auſtral. ♄
11′ 33″
3 30 39 ♄ in hor.
41 17 St. *a* in h. auſtral. ♄
11′ 33″
3 53 54 ♄ in hor.
4 4 33 St. *a* in h. auſtral. ♄
11′ 33″
4 23 45½ ♄ in hor.
34 24 St. *a* in h. auſtral. ♄
11′ 33″.

Febr. 1 mane
1^h 38′ 40″ ♄ in hor.
49 15 St. *a* in h. auſtral. ♄
11′ 32″
2 0 27 ♄ in hor.
11 2 St. *a* in h. auſtral. ♄
11′ 32″.

Febr. 2 mane
1^h 8′ 53″ ♄ in hor.
19 27 St. *a* in h. auſtral. ♄
11′ 47″
1 27 0 ♄ in hor.
37 34 St. *a* in h. auſtral. ♄
11′ 42″.

1^h 43′ 51″ ♄ in hor.
54 26 St. *a* in h. auſtral. ♄ 11′ 45″
2 1 28 ♄ in hor.
12 3 St. *a* in h. auſtral. ♄ 11′ 40″.

Febr. 3 mane
1^h 48′ 20″ ♄ in hor.
58 53 St. *a* in h. auſtral. ♄ 12′ 0″
2 5 49 ♄ in hor.
16 22 St. *a* in h. auſtral. ♄ 11′ 52″
3 4 56½ ♄ in hor.
15 30 St. *a* in h. auſtral. ♄ 11′ 52″
3 20 37 ♄ in hor.
31 10 St. *a* in h. auſtral. ♄ 11′ 52″.

Febr. 4 mane
1^h 9′ 25″ ♄ in hor.
19 58 St. *a* in h. auſtral. ♄ 12′ 12″
1 25 38 ♄ in hor.
36 10 St. *a* in h. auſtral. ♄ 12′ 15″

1^h 42′ 33″ ♄ in hor.
53 6 St. *a* in h. auſtral. ♄ 12′ 12″
1 59 22 ♄ in hor.
2 9 55 St. *a* in h. auſtral. ♄ 12′ 12″.

Febr. 5 mane
1^h 4′ 8½″ ♄ in hor.
14 41 St. *a* in h. auſtral. ♄ 12′ 25″
1 19 10 ♄ in hor.
29 42 St. *a* in h. auſtral. ♄ 12′ 28″
1 39 11 ♄ in hor.
49 43 St. *a* in h. auſtral. ♄ 12′ 24″
1 55 37 ♄ in hor.
2 6 9 St. *a* in h. auſtral. ♄ 12′ 35″ dub.

Febr. 6 mane
1^h 30′ 20″ ♄ in hor.
40 51 St. *a* in h. auſtral. ♄ 12′ 42″
1 46 7 ♄ in hor.
56 38 St. *a* in h. auſtral. ♄ 12′ 23″.

2^h 0′ 54″ ♄ in hor.
11 25 St. *a* in h. auſtral. ♄ 12′ 42″.

Febr. 7 mane
5^h 38′ 30″ ♄ in hor.
49 2 St. *a* in h. auſtral. ♄ 12′ 54″.
Poſtea nubes.

Febr. 8 mane
1^h 1′ 16½″ ♄ in hor.
11 49 St. *a* in h. auſtral. ♄ 13′ 20″
1 17 7 ♄ in hor.
27 39 St. *a* in h. auſtral. ♄ 13′ 27″
1 31 47 ♄ in hor.
42 20 St. *a* in h. auſtral. ♄ 13′ 18″.

Febr. 10 mane
1^h 15′ 29″ ♄ in hor.
26 6 St. *a* in h. auſtral. ♄ 14′ 14″
1 30 56 ♄ in hor.
41 33 St. *a* in h. auſtral. ♄ 14′ 14″
1^h 45′ 46″ ♄ in hor.
56 22 St. *a* in h. auſtral. ♄ 14′ 14″.

Febr. 11 mane
3^h 52′ 21″ ♄ in hor.
4 2 59 St. *a* in h. auſtral. ♄ 14′ 37″
4 11 13 ♄ in hor.
21 51 St. *a* in h. auſtral. ♄ 14′ 29″
4 28 1 ♄ in hor.
38 39 St. *a* in h. auſtral. ♄ 14′ 39″
4 44 46 ♄ in hor.
55 24 St. *a* in h. auſtral. ♄ 14′ 41″.

Febr. 13 mane
2^h 31′ 3″ ♄ in hor.
41 46 St. *a* in h. auſtral. ♄ 15′ 41″
2 47 21 ♄ in hor.
58 5 St. *a* in h. auſtral. ♄ 15′ 40″
3 4 16 ♄ in hor.
14 59 St. *a* in h. auſtral. ♄ 15′ 42″.

3^h 20′ 22″ ♄ in hor.
31 5 St. *a* in h. auſtral. ♄ 15′ 42″.

Eodem mane comparavi cum ♄^{no} & inter ſe 3 ſtellulas, quia 3 ſolum vidi, earum quatuor, quæ iſthic ponuntur in Zod. ſtell. Flamſt. nempe

3^h 4′ 16″ ♄ in hor.
12 37 Stell. obſcurior in h.
14 33 Lucidarum boreal.
14 59 Lucidarum auſtral.

Et hæc eſt ipſa ſtella *a*.

Tum iterum.

3^h 20′ 22″ ♄ in hor.
28 43 St. obſcurior.
30 39 Lucid. borealior.
31 5 Lucid. auſtralior.

Eſt autem ſtellula obſcurior auſtralior, quam lucidarum borea 21′ 17″.

Et lucidarum borea eſt borealior, quam auſtrina 25′ 9″; contra quam in citato Zod.

Febr. 18 veſp. ſub mediam noct.
11^h 54′ 50″ ♄ in h. & poſt med. noctem

Febr. 19 mane
0^h 5′ 56″ St. *a* in h. auſtral. ♄ 19′ 31″
0 11 59 ♄ in hor.
23 6 St. *a* in h. auſtral. ♄ 19′ 31″
0 28 16 ♄ in hor.
39 22 St. *a* in h. auſtral. ♄ 19′ 31″.

April. 5 mane cum immineret ☍ ☉ ♄, comparatus iterum ♄ cum ſtella *m* ♍.
4^h 35′ 42″ St. *m* in horario.
40 29 ♄ in h. borealior ſtellà 39′ 36″, neque repetere licuit.

April. 8 mane

3^h 47′ 56″ St. *m* in hor.
51 49 ♄ in h. boreal. ſtellâ 44′ 42″
3 57 4 St. *m* in hor.
4 0 59 ♄ in h. boreal. ſtellâ 44′ 36″

4^h 9′ 18″ St. *m* in hor.
13 11 ♄ in h. boreal. ſtellâ 44′ 32″
4 18 40 St. *m* in hor.
22 34 ♄ in h. boreal. ſtellâ 44′ 32″.

Maji 21 veſpere cum ♄ ad 2 ſtellas *l* in ♍ ſenſim accederet juxta illas ſtationem alteram peracturus, cœpi hodie eundem cum his comparare, & primis diebus per diſtantias ſolum, deinde per differentias aſcens. & declin.

8^h 13′ 0″ ♄ a ſtella *l* minore, quæ eſt auſtral., diſtat 1° 1′ 18″
8. 17 0 ♄ a ſtella majore, quæ eſt boreal., diſtat 0 51 55.

Maji. 22 veſpere
7^h 49′ 0″ ♄ a majore 49′ 4″
8 3 0 ♄ a minore 59 17.

Maji. 26 veſpere
8^h 45′ 0″ ♄ a minore 48′ 19″
8 48 0 ♄ a majore 40 34.

Maji. 23 veſpere
8^h 2′ 0″ ♄ a minore 56′ 23″
8 5 0 ♄ a majore 46 56.

Maji. 31 veſpere
9^h 18′ 30″ ♄ a minore 36′ 4″
9 22 0 ♄ a majore 33 13.

Jun. 1 veſpere
$9^h\ 23'\ 0''$ ♄ a min. $34'\ 16''$
9 26 0 ♄ a maj. 32 25.

Jun. 4 veſpere
$9^h\ 6'\ 27''$ ♄ a min. $28'\ 46''$
9 10 20 ♄ a maj. 30 23.

Jun. 5 veſpere
$8^h\ 39'\ 0''$ ♄ a min. $27'\ 17''$
8 42 30 ♄ a maj. 30 7.

Jun. 6 veſpere
$8^h\ 31'\ 22''$ ♄ a min. $25'\ 47''$
8 35 32 ♄ a maj. 29 54.

Jun. 7 veſpere
$8^h\ 43'\ 30''$ ♄ a min. $24'\ 11''$
8 47 30 ♄ a maj. 29 47.

Jun. 8 veſpere
$9^h\ 10'\ 0''$ ♄ a min. $22'\ 50''$
9 16 0 ♄ a maj. 29 41.

Jun. 13 veſpere
$9^h\ 24'\ 0''$ ♄ a min. $18'\ 4''$
9 28 0 ♄ a maj. 29 39.
Et eodem tempore
9 39 30 ♄ in horario.
40 24 St. *l* maj. in h. bor.
♄ $27'\ 38''$.

Jun. 15 veſpere
$9^h\ 8'\ 19''$ ♄ in hor.
9 20 St. *l* maj. in h. bor.
♄ $27'\ 31''$
9 17 23 ♄ in hor.
18 24 St. *l* maj. in h. bor.
♄ $27'\ 27''$
9 25 20 ♄ in hor.
26 21 St. *l* maj. in h. bor.
♄ $27'\ 26''$.

Jun. 16 veſpere
$8^h\ 3'\ 1''$ ♄ in hor.
4 5 St. *l* maj. in h. bor.
♄ $27'\ 24''$
8 10 20 ♄ in hor.
11 24 St. *l* maj. in h. bor.
♄ $27'\ 19''$
8 15 13 ♄ in hor.
16 17 St. *l* maj. in h. bor.
♄ $27'\ 28''$.

8^h 21′ 30″ ♄ in hor.
22 34 St. *l* maj. in h. bor.
♄ 27′ 26″
8 29 0 ♄ diſt. a *l* minore
16′ 45″
8 32 50 — a majore
31′ 54″.

Jun. 17 veſpere
7^h 50′ 8″ ♄ in hor.
51 14 St. *l* maj. in h. bor.
♄ 27′ 26″
7 57 40 ♄ in hor.
58 46 St. *l* maj. in h. bor.
♄ 27′ 26″
8 2 15 ♄ in hor.
3 21 St. *l* maj. in h. bor.
♄ 27′ 25″
8 10 0 ♄ diſt. a *l* minore
15′ 56″
8 16 0 ♄ a majore
33′ 21″.

Jun. 18 veſpere
7^h 47′ 56″ ♄ in hor.
49 5 St. *l* maj. in h. bor.
♄ 27′ 24″

7^h 52′ 45″ ♄ in hor.
53 54 St. *l* maj. in h. bor.
♄ 27′ 26″
7 57 50 ♄ in hor.
58 59 St. *l* maj. in h. bor.
♄ 27′ 22″
8 4 0 ♄ diſt. a minore
16′ 10″
8 7 0 ♄ diſt. a majore
32′ 17″.

Jun. 20 veſpere
8^h 3′ 46″ ♄ in hor.
4 58 St. *l* maj. in h. bor.
♄ 27′ 38″
8 17 25 ♄ in hor.
18 37 St. *l* maj. in h. bor.
♄ 27′ 38″
8 25 38 ♄ in hor.
26 50 St. *l* maj. in h. bor.
♄ 27′ 42″
8 31 46 ♄ in hor.
32 58 St. *l* maj. in h. bor.
♄ 27′ 36″
8 41 0 ♄ diſt. a minore
16′ 5″
8 46 0 ♄ diſt. a majore
33′ 14″.
Major a minore 26′ 59″.

Jun. 21 veſpere

8^h $0'$ $51''$ ♄ in hor.
2 5 St. *l* maj. in h. bor.
♄ $27'$ $48''$

8 8 14 ♄ in hor.
9 28 St. *l* maj. in h. bor.
♄ $27'$ $47''$

8 15 19 ♄ in hor.
16 33 St. *l* maj. in h. bor.
♄ $27'$ $49''$

8 34 14 ♄ diſt. a minore
$15'$ $56''$

8 38 10 ♄ diſt. a majore
$33'$ $21''$.

Jun. 24 veſpere

8^h $26'$ $50''$ ♄ in hor.
28 6 St. *l* maj. in h. bor.
♄ $28'$ $29''$

8 33 23 ♄ in hor.
34 38 St. *l* maj. in h. bor.
♄ $28'$ $45''$

9 7 49 ♄ in hor.
9 4½ St. *l* maj. in h. bor.
♄ $28'$ $36''$

9 15 52 ♄ in hor.
17 17½ St. *l* maj. in h. bor.
♄ $28'$ $36''$.

Jun. 25 veſpere

8^h $34'$ $21''$ ♄ in hor.
35 36 St. *l* maj. in h. bor.
♄ $28'$ $51''$

8 40 50 ♄ in hor.
42 5 St. *l* maj. in h. bor.
♄ $28'$ $54''$

8 47 13 ♄ in hor.
48 28 St. *l* maj. in h. bor.
♄ $28'$ $47''$

8 53 23 ♄ in hor.
54 38 St. *l* maj. in h. bor.
♄ $28'$ $49''$.

Jun. 26 veſpere

8^h $17'$ $2''$ ♄ in hor.
18 17 St. *l* maj. in h. bor.
♄ $29'$ $9''$

8 22 27 ♄ in hor.
23 41 St. *l* maj. in h. bor.
♄ $29'$ $12''$

8 27 56 ♄ in hor.
29 10 St. *l* maj. in h. bor.
♄ $29'$ $11''$

8 33 52 ♄ in hor.
35 7 St. *l* maj. in h. bor.
♄ $29'$ $12''$.

8^h

8^h 51′ 0″ ♄ in hor.
52 $14\frac{1}{2}$ St. *l* maj. in h. bor.
29′ 8″
8 57 43 ♄ diſt. a minore
17′ 22″

9^h 2′ 0″ ♄ diſt. a majore
34′ 33″.
Tum poſt multos dies pluvios, & nubilos.

Jul. 4 veſpere
8^h 4′ 30″ ♄ in hor.
5 27 St. *l* maj. in h. bor.
♄^{no} 33′ 15″
8 9 48 ♄ in hor.
10 46 St. *l* maj. in h. bor.
♄^{no} 33′ 18″
8 15 16 ♄ in hor.
16 $13\frac{2}{3}$ St. *l* maj. in h. bor.
♄^{no} 33′ 19″
8 20 21 ♄ in hor.
21 19 St. *l* maj. in h. bor.
♄^{no} 33′ 20″.

Jul. 7 veſpere
8^h 16′ 18″ ♄ in hor.
17 2 St. *l* maj. in h. bor.
♄^{no} 35′ 27″
8 27 58 ♄ in hor.
28 42 St. *l* maj. in h. bor.
♄^{no} 35′ 32″

8^h 35′ 3″ ♄ in hor.
47 St. *l* maj. in h. bor.
♄^{no} 35′ 32″.

Jul. 10 veſpere ex repetitis operationibus viſa tuta ſequens:
8^h 26′ 31″ ♄ in hor.
59 St. *l* maj. in h. bor.
♄^{no} 38′ 20″.

Jul. 14 veſpere ab h. 8 15′ ad h. 8 30′ repetitis quinque operationibus nullam deprehendere potui inter ♄^{mum} & ſtell. majorem *l* differentiam aſcenſionis, quia ſemper una tranſibant horarium. Erat

autem ſtella *l* borealior ♄^{no} conſtanter 41′ 50″; diſtabat item tum ♄ a ſtella *l* minore 37′ 21″.

Jul. 20 veſpere

7^{h} 54′ 0″ ♄ diſt. a *l* majore 50′ 8″.
7 57 0 ♄ diſt. a *l* minore 50′ 59″

8^{h} 14′ 5″ St. *l* major in h.
56 ♄ in h. auſtral. ſtellâ 48′ 39″.

Jul. 23 veſpere

8^{h} 1′ 11″ St. *l* major in h.
2 33 ♄ in h. auſtral. ſtellâ 52′ 22″
8 7 28 St. *l* major in h.
8 49 ♄ in h. auſtral. ſtellâ 52′ 23″.

Dec. 7 mane comparatus ♄ cum 2 ſtellulis gemellis infra plantam pedis ſiniſtri Virginis.

6^{h} 0′ 0″	♄ diſtabat a ſtellula orientaliore earum	32′	52″
6 3 0	— ab occidentaliore	46	19.

Dec 9 mane

5^{h} 39′ 30″	♄ diſt. ab occidentaliore	58′	7″
5 45 0	— ab orientaliore	43	47.

Anno 1748.

Maji. 14 veſpere comparatus ♄ cum iiſdem duabus gemellis infra plantam pedis ſiniſtri Virginis, cum quibus ſuperiore Decembri, tum directus, nunc retrogradus.

8h 36′ 0″		♄ diſtabat ab orientaliore earum	12′ 56″
		ab occidentaliore	16 10.

Jun. 25 veſpere ♄ cum iiſdem. Non admodum feliciter.

8h 23′	33″	♄ in horario.	
30	16	Stella occidentalior in h. auſtralior ♄no	43′ 1″
31	33	Stella orientalior in h. auſtralior ♄	40 48
8 35	27	♄ in horario.	
		Stella occid. neglecta in h. auſtralior ♄	43 11
43	25	Stella orientalior in h. auſtralior ♄	40 40
8 47	15	♄ in horario.	
53	54	Stella occid. neglecta in h. auſtralior ♄	43 9
55	12	Stella orientalior in h. auſtralior ♄	40 53.

Jun. 27 veſpere ♄ cum iiſdem.

8h 0′	52″	♄ in horario.	
7	43	Stella occid. in h. auſtralior ♄	42′ 59″
8	59½	Stella orientalior in h. auſtralior ♄	vacat.
8 24	55	♄ in horario.	
31	45	Stella occid. in h. auſtralior ♄	42 59
33	1	Stella orientalior in h. auſtralior ♄	40 47
8 36	17	♄ in horario.	
43	7	Stella occid. in h. auſtralior ♄	42 59
44	23	Stella orientalior in h. auſtralior ♄	40 49.

Eodem veſpere cœpi, & poſtea perrexi comparare ♄mum cum ſtella κ in ora ima veſtis ad talum Virginis.

Jun. 27 veſpere
8^h 52′ 14″ St. ϰ ♍ in hor.
55 47 ♄ in h. auſtral. ſtellâ
44′ 33″.

Jun. 28 veſpere
8^h 40′ 9″ St. ϰ ♍ in hor.
43 38 ♄ in h. auſtral. ſtellâ
44′ 34″
8 47 17 St. ϰ ♍ in hor.
50 46½ ♄ in h. auſtral. ſtellâ
44′ 38″
8 59 3 St. ϰ ♍ in hor.
9 2 33 ♄ in h. auſtral. ſtellâ
44′ 33″.

Jun. 29 veſpere
8^h 33′ 37″ St. ϰ ♍ in hor.
37 3 ♄ in h. auſtral. ſtellâ
44′ 36″
8 39 36 St. ϰ ♍ in hor.
43 3 ♄ in h. auſtral. ſtellâ
44′ 36″
8 45 31 St. ϰ ♍ in hor.
48 57 ♄ in h. auſtral. ſtellâ
44′ 36″
8 51 41 St. ϰ ♍ in hor.
55 8 ♄ in h. auſtral. ſtellâ
44′ 36″.

Jun. 30 veſpere
8^h 27′ 4″ St. ϰ ♍ in hor.
30 28 ♄ in h. auſtral. ſtellâ
44′ 40″
8 37 19 St. ϰ ♍ in hor.
40 44 ♄ in h. auſtral. ſtellâ
44′ 33″
8 42 20 St. ϰ ♍ in hor.
45 45 ♄ in h. auſtral. ſtellâ
44′ 33″
8 47 43 St. ϰ ♍ in hor.
51 7 ♄ in h. auſtral. ſtellâ
44′ 50″.

Jul. 8 veſp. (poſt dies pluvios)
8^h 4′ 21″ St. ϰ ♍ in hor.
7 40 ♄ in h. auſtral. ſtellâ
46′ 31″
8 9 27 St. ϰ ♍ in hor.
12 45 ♄ in h. auſtral. ſtellâ
46′ 31″
8 15 21 St. ϰ ♍ in hor.
18 41 ♄ in h. auſtral. ſtellâ
46′ 22″
8 20 44 St. ϰ ♍ in hor.
24 3 ♄ in h. auſtral. ſtellâ
46′ 27″
8 26 51 St. ϰ ♍ in hor.
30 9 ♄ in h. auſtral. ſtellâ
46′ 32″.

Jul. 10 veſpere
8ʰ 30′ 40″ St. ϰ ♍ in hor.
34 2 ♄ in h. auſtral. ſtellâ
47′ 19″
8 36 42 St. ϰ ♍ in hor.
40 5 ♄ in h. auſtral. ſtellâ
47′ 6″
8 42 40 St. ϰ ♍ in hor.
46 2 ♄ in h. auſtral. ſtellâ
47′ 21″.

Jul. 11 veſpere
8ʰ 12′ 46″ St. ϰ ♍ in hor.
16 8 ♄ in h. auſtral. ſtellâ
47′ 54″
8 18 8 St. ϰ ♍ in hor.
21 32 ♄ in h. auſtral. ſtellâ
47′ 40″
8 23 56 St. ϰ ♍ in hor.
27 19 ♄ in h. auſtral. ſtellâ
47′ 45″
8 29 49 St. ϰ ♍ in hor.
33 12 ♄ in h. auſtral. ſtellâ
47′ 43″.

Jul. 19 veſpere
7ʰ 54′ 51″ St. ϰ ♍ in hor.
58 41 ♄ in h. auſtral. ſtellâ
52′ 28″
8ʰ 47′ 27″ St. ϰ ♍ in hor.
51 21 ♄ in h. auſtral. ſtellâ
52′ 19″
8 54 31 St. ϰ ♍ in hor.
58 22 ♄ in h. auſtral. ſtellâ
52′ 33″
9 2 18 St. ϰ ♍ in hor.
6 10 ♄ in h. auſtral. ſtellâ
52′ 29″
9 8 16 St. ϰ ♍ in hor.
12 8 ♄ in h. auſtral. ſtellâ
52′ 34″
9 14 57 St. ϰ ♍ in hor.
18 50 ♄ in h. auſtral. ſtellâ
52′ 31″.

Jul. 20 veſpere
7ʰ 38′ 59″ St. ϰ ♍ in hor.
42 56 ♄ in h. auſtral. ſtellâ
53′ 9″
7 46 36 St. ϰ ♍ in hor.
50 32 ♄ in h. auſtral. ſtellâ
53′ 19″
7 53 1 St. ϰ ♍ in hor.
56 56 ♄ in h. auſtral. ſtellâ
53′ 24″
8 9 45 St. ϰ ♍ in hor.
13 43 ♄ in h. auſtral. ſtellâ
53′ 14″.

8h 15′ 51″ St. κ ♍ in hor.
19 47 ♄ in h. auſtral. ſtellâ
53′ 16″.

Eodem veſpere comparare cœpi ♄mum iterum cum duabus illis ſtellis ſub planta pedis ſiniſtri Virginis, cum quibus idem comparabatur ſuperioribus Decembri & Majo.

Jul. 20 veſpere
8h 27′ 20″ ♄ in hor.
35 3 St. orient. in h. auſtr.
♄ 32′ 4″
8 41 45 ♄ in hor.
48 11 St. occid. in h. auſtr.
♄ 33′ 58″
8 55 27 ♄ in hor.
9 1 54 St. occid. in h. auſtr.
♄ 34′ 17″
9 5 42 ♄ in hor.
13 23 St. orient. in h. auſtr.
♄ 31′ 56″.

Jul. 23 veſpere
9h 4′ 22″ ♄ in hor.
10 30 St. occid. in h. auſtr.
♄ 31′ 44″

9h 15′ 48″ ♄ in hor.
21 57 St. occid. in h. auſtr.
♄ 31′ 42″
9 24 30 ♄ in hor.
30 37 St. occid. in h. auſtr.
♄ 31′ 46″
9 43 18 ♄ in hor.
49 26 St. occid. in h. auſtr.
♄ 31′ 44″.

Jul. 25 veſpere
8h 2′ 4″ ♄ in hor.
7 58 St. occid. in h. auſtr.
♄ 30′ 16″
8 22 4 ♄ in hor.
27 59 St. occid. in h. auſtr.
♄ vacat.
8 30 37 ♄ in hor.
36 32 St. occid. in h. auſtr.
♄ vacat.
8 39 53 ♄ in hor.
45 47 St. occid. in h. auſtr.
♄ 30′ 15″.

Jul. 26 veſpere
7h 57′ 9″ ♄ in hor.
8 2 57 St. occid. in h. auſtr.
♄ 29′ 10″.

8^h 7′ 57″ ♄ in hor.
13 44 St. occid. in h. auſtr.
♄ 29′ 6″
8 18 4 ♄ in hor.
23 52 St. occid. in h. auſtr.
♄ 29′ 8″
25 8 St. orient. in h. auſtr.
♄ 26′ 50″
8 30 56 ♄ in hor.
36 44 St. occid. in h. auſtr.
♄ 29′ 9″
38 0 St. orient. in h. auſtr.
♄ 26′ 40″.

8^h 20′ 54″ ♄ in hor.
26 36 St. occid. in h. auſtr.
♄ 28′ 15″.

Jul. 27 veſpere
7^h 51′ 9″ ♄ in hor.
56 50 St. occid. in h. auſtr.
♄ 28′ 15″

Jul. 30 veſpere
7^h 53′ 42″ ♄ in hor.
58 57 St. occid. in h. auſtr.
♄ 25′ 0″
8 12 15 ♄ in hor.
17 31 St. occid. in h. auſtr.
♄ 25′ 6″
8 20 19 ♄ in hor.
25 35 St. occid. in h. auſtr.
♄ 25′ 10″
8 28 23 ♄ in hor.
33 38 St. occid. in h. auſtr.
♄ 25′ 9″.

Aug. 6 veſpere
7^h 43′ 47″ ♄ in hor.
47 52 St. occid. in h. auſtr.
♄ 16′ 49″
7 53 26 ♄ in hor.
57 30 St. occid. in h. auſtr.
♄ 16′ 49″
8 0 4 ♄ in hor.
4 9 St. occid. in h. auſtr.
♄ 16′ 49″.

Aug. 12 veſpere
7^h 50′ 35″ ♄ in hor.
53 25 St. occid. in h. auſtr.
♄ 8′ 40″
7 55 3[illegible] ♄ in hor.
58 30 St. occid. in h. auſtr.
♄ 8′ 36″
8 1 51 ♄ in hor.
4 42 St. occid. in h. auſtr.
♄ 8′ 40″.

8ʰ 5′ 58″ ♄ in hor.
8 48 St. occid. in h. auſtr.
♄ 8′ 36″.

Aug. 13 veſpere
7ʰ 30′ 30″ ♄ in hor.
33 8 St. occid. in h. auſtr.
♄ 7′ 15″
7 40 47 ♄ in hor.
43 24 St. occid. in h. auſtr.
♄ 7′ 18″
7 45 42 ♄ in hor.
48 20 St. occid. in h. auſtr.
♄ 7′ 16″.

Aug. 14 veſpere
7ʰ 46′ 39″ ♄ in hor.
49 2 St. occid. in h. auſtr.
♄ 5′ 44″
7 51 7 ♄ in hor.
53 31 St. occid. in h. auſtr.
♄ 5′ 40″
7 56 38 ♄ in hor.
59 2 St. occid. in h. auſtr.
♄ 5′ 42″.

Aug. 15 veſpere
7ʰ 24′ 18″ ♄ in hor.
26 28 St. occid. in h. auſtr.
♄ 4′ 16″
7 30 30 ♄ in hor.
32 39 St. occid. in h. auſtr.
♄ 4′ 26″
7 39 14 ♄ in hor.
41 23 St. occid. in h. auſtr.
♄ 4′ 20″
7 43 28 ♄ in hor.
45 38 St. occid. in h. auſtr.
♄ 4′ 18″.

Aug. 16 veſpere
7ʰ 23′ 51″ ♄ in hor.
25 46 St. occid. in h. auſtr.
♄ 2′ 48″
7 28 18 ♄ in hor.
30 14 St. occid. in h. auſtr.
♄ 2′ 45″
7 32 7 ♄ in hor.
34 3 St. occid. in h. auſtr.
♄ 2′ 41″
7 36 41 ♄ in hor.
38 36 St. occid. in h. auſtr.
♄ 2′ 46″.

Aug. 17

Aug. 17 veſpere

7^h	51′	17″	♄ in horario.		
	52	58	St. occidentalior in hor. auſtral. ♄	1′	4″
7	55	15	♄ in horario.		
	56	56	St. occidentalior in hor. auſtral. ♄	1	10
7	59	3	♄ in horario.		
8	0	44	St. occidentalior in hor. auſtral. ♄	1	7.

Aug. 21 veſpere

7 23 . 0 ♄ occidentalior ſtellâ occidentalior. 0′ 40″, eademque auſtralior — — — — — 4′ 58″.

Aug. 22 veſpere

7^h 50′ 0″ ♄ auſtral. ſtellâ occ. 6′ 38″, diſt. ab eadem 7′ 47″.

Aug. 23 veſpere

7^h 50′ 0″ ♄ auſtral. ſtellâ occ. 0′ 6″, eâque auſtral. 8′ 11″.

Aug. 24 veſpere

7^h 31′ 14″ Stella occidentalior in horario.

24½ ♄ in h. auſtralior ſtellâ 9′ 56″, diſtans a ſtella occidentaliore 10′ 21″, & ab orientaliore 20′ 11″.

Dec. 4 mane

6^h 29′ 44″ ♄ diſtabat a ſtella ν in ♎ majuſcula in boream 57′ 27″.

Dec. 5 mane
$5^h\ 24'\ 2''$ ♄ diſtabat ab eadem $57'\ 22''$.

Dec. 28 mane comparatus ♄ cum ſtellula *o*, quæ in Zod. ſtell. Flamſt. ponitur media inter ♎ & ♏, & vocatur *o* ♎, cui propior

$4^h\ 58'\ 23''$ ♄ in hor.
5 2 56 St. *o* in h. boreal. ♄ $20'\ 17''$
5 13 25 ♄ in hor.
17 59 St. *o* in h. boreal. ♄ $20'\ 22''$

$5^h\ 20'\ 18''$ ♄ in hor.
24 52 St. *o* in h. boreal. ♄ $20'\ 13''$
6 10 9 ♄ in hor.
14 42 St. *o* in h. boreal. ♄ $20'\ 11''$.

Anno 1749.

Jan. 10 mane
$6^h\ 10'\ 35''$ ♄ in hor.
44 St. *o* in h. boreal. ♄ $23'\ 45''$
Certa.

$5^h\ 35'\ 59''$ St. *o* in hor.
36 7 ♄ in h. auſtral. ſtellâ $37'\ 48''$.

Jan. 11 mane
$5^h\ 26'\ 36''$ St. *o* in hor.
44 ♄ in h. auſtral ſtellâ $37'\ 41''$
5 32 5 St. *o* in hor.
13 ♄ in h. auſtral. ſtellâ $37'\ 47''$

Jan. 31 mane cœpi comparare ♄^num^ cum ſtella ζ ibidem viciniæ.
$5^h\ 12'\ 35''$ ♄ in hor.
19 13 St. ζ in h. auſtral. ♄ $27'\ 19''$
5 22 28 ♄ in hor.
29 6 St. ζ in h. auſtral. ♄ $27'\ 15''$.

5^{h} 31′ 51″ ♄ in hor.
38 29 St. ζ in h. auſtral. ♄
27′ 15″

Febr. 1 mane
4^{h} 0′ 9″ ♄ in hor.
6 37 St. ζ in h. auſtral. ♄
26′ 35″
4 9 17 ♄ in hor.
15 45 St. ζ in h. auſtral. ♄
26′ 42″
4 17 51 ♄ in hor.
24 18 St. ζ in h. auſtral. ♄
26′ 42″
4 26 29½ ♄ in hor.
32 57 St. ζ in h. auſtral. ♄
26′ 42″.

Febr. 5 mane
5^{h} 29′ 58″ ♄ in hor.
35 43 St. ζ in h. auſtral. ♄
24′ 55″
5 38 0 ♄ in hor.
43 45 St. ζ in h. auſtral. ♄
24′ 46″
5 45 56 ♄ in hor.
51 41 St. ζ in h. auſtral. ♄
24′ 54″.

Febr. 8 mane
4^{h} 50′ 27″ ♄ in hor.
55 46 St. ζ in h. auſtral. ♄
23′ 47″
4 59 40 ♄ in hor.
5 5 0 St. ζ in h. auſtral. ♄
23′ 47″
5 12 27 ♄ in hor.
17 46 St. ζ in h. auſtral. ♄
23′ 47″
5 20 1 ♄ in hor.
25 21 St. ζ in h. auſtral. ♄
23′ 47″.

Febr. 10 mane
4^{h} 33′ 34″ ♄ in hor.
38 38 St. ζ in h. auſtral. ♄
23′ 7″
4 44 38 ♄ in hor.
49 42 St. ζ in h. auſtral. ♄
23′ 7″
4 52 2 ♄ in hor.
57 6 St. ζ in h. auſtral. ♄
23′ 7″.

Febr. 16 mane
4^h 58′ 35″ ♄ in hor.
5 3 3 St. ζ in h. auſtral. ♄ 21′ 52″
5 5 23 ♄ in hor.
9 50 St. ζ in h. auſtral. ♄ 21′ 52″
5 13 7 ♄ in hor.
17 34 St. ζ in h. auſtral. ♄ 21′ 52″.

Febr. 22 mane
4^h 13′ 17″ ♄ in hor.
17 22 St. ζ in h. auſtral. ♄ 21′ 50″
4 20 50 ♄ in hor.
24 54 St. ζ in h. auſtral. ♄ 21′ 52″
4 27 51 ♄ in hor.
31 54 St. ζ in h. auſtral. ♄ 21′ 52″
4 33 43 ♄ in hor.
37 47 St. ζ in h. auſtral. ♄ 21′ 52″.

Tum poſt multos dies nubibus impeditos & nivibus, ♄^no^ iam retrogrado.

Mart. 3 mane
5^h 40′ 30″ ♄ in hor.
44 29 St. ζ in h. auſtral. ♄ 23′ 20″
5 46 54 ♄ in hor.
50 53 St. ζ in h. auſtral. ♄ 23′ 28″
5 57 58 ♄ in hor.
6 1 57 St. ζ in h. auſtral. ♄ 23′ 22″.

Mart. 4 mane
5^h 39′ 55″ ♄ in hor.
43 55 St. ζ in h. auſtral. ♄ 23′ 49″
5 45 42 ♄ in hor.
49 42 St. ζ in h. auſtral. ♄ 23′ 37″
5 53 2 ♄ in hor.
57 1 St. ζ in h. auſtral. ♄ 23′ 29″
5 58 57 ♄ in hor.
6 2 56 St. ζ in h. auſtral. ♄ vacat.

Mart. 5 mane
5^h 41′ 25″ ♄ in hor.
45 26 St. ζ in h. auſtral. ♄ 23′ 51″.

5^h 47′ 11″ ♄ in hor.	5^h 52′ 40″ ♄ in hor.
51 11 St. ζ in h. auſtral. ♄	56 40 St. ζ in h. auſtral. ♄
23′ 59″	24′ 2″.

Oct. 2 veſpere ♄ comparatus cum ſtella o ♎.
6^h 36′ 0″ ♄ occidentalior ſtellâ 0° 2′ 3″ penduli, eâque auſtralior 42′ 7″, diſtans ab eadem 51′ 11″.

Oct. 3 veſpere comparatus ♄ cum ſtella ζ eadem, cum qua ſuperiore menſe Martio.

6^h 19′ 10″ ♄ in hor.	6^h 36′ 26″ ♄ in hor.
32 32 St. ζ in h. auſtral. ♄	49 50 St. ζ in h. auſtral. ♄
37′ 17″	37′ 17″.

Oct. 9 veſpere comparatus ♄ cum ſtellarum trium ζ maxime occidentali.

6^h 17′ 57″ ♄ in hor.	6^h 28′ 2″ ♄ in hor.
24 14 St. ζ in h. auſtral. ♄	34 20 St. ζ in h. auſtral. ♄
16′ 39″	16′ 47″.

Dec. 30 mane cœpi comparare ♄num cum ſtella ν in ♏.

5^h 55′ 20″ ♄ in hor.	Dec. 31 mane
6 7 29 St. ν in h. auſtral. ♄	6^h 11′ 8″ ♄ in hor.
55′ 7″	22 49 St. ν in h. auſtral. ♄
	53′ 54″.

Anno 1750.

Jan. 2 mane
$5^h\ 38'\ 20''$ ♄ in hor.
49 14 St. ν ♍ in h. auſtr. ♄
51′ 56″
6 5 38 ♄ in hor.
16 32 St. ν ♍ in h. auſtr. ♄
51′ 37″
6 19 24 ♄ in hor.
30 18 St. ν ♍ in h. auſtr. ♄
51′ 24″.

Cum autem differentiæ declinationum ita varient, ultima viſa tutior, quia viſa die jam claro ſine lucerna.

Jan. 5 mane
$5^h\ 26'\ 18''$ ♄ in hor.
36 2 St. ν ♍ in h. auſtr. ♄
47′ 54″
5 38 47 ♄ in hor.
48 29 St. ν ♍ in h. auſtr. ♄
47′ 55″
6 0 22 ♄ in hor.
10 6 St. ν ♍ in h. auſtr. ♄
47′ 49″.

Jan. 7 mane
$5^h\ 26'\ 56''$ ♄ in hor.
35 53 St. ν ♍ in h. auſtr. ♄
45′ 37″
5 40 33 ♄ in hor.
49 29 St. ν ♍ in h. auſtr. ♄
45′ 41″
5 53 36 ♄ in hor.
6 2 33 St. ν ♍ in h. auſtr. ♄
45′ 41″.

Jan. 9 mane
$5^h\ 18'\ 8''$ ♄ in hor.
26 20 St. ν ♍ in h. auſtr. ♄
43′ 35″
5 40 18 ♄ in hor.
48 29 St. ν ♍ in h. auſtr. ♄
43′ 35″
5 50 16 ♄ in hor.
58 27 St. ν ♍ in h. auſtr. ♄
43′ 35″.

Jan. 11 mane
$6^h\ 21'\ 0''$ ♄ in hor.
28 25 St. ν ♍ in h. auſtr. ♄
41′ 38″.

6ʰ 30′ 49″ ♄ in hor.
38 16 St. ν ♏ in h. auſtr. ♄ 41′ 27″
6 39 44 ♄ in hor.
47 11 St. ν ♏ in h. auſtr. ♄ 41′ 27″
6 50 23 ♄ diſtabat a ſtella β in ♏ 1° 1′ 25″.

Jan. 14 mane
5ʰ 44′ 40″ ♄ in hor.
51 4 St. ν ♏ in h. auſtr. ♄ 38′ 28″
5 53 15 ♄ in hor.
59 39 St. ν ♏ in h. auſtr. ♄ 38′ 28″
6 1 5 ♄ in hor.
7 29 St. ν ♏ in h. auſtr. ♄ 38′ 28″
6 13 37 ♄ diſt. a β ♏ 57′ 7″.

Jan. 16 mane
5ʰ 38′ 50″ ♄ in hor.
44 32 St. ν ♏ in h. auſtr. ♄ 36′ 35″
5 46 26 ♄ in hor.
52 8 St. ν ♏ in h. auſtr. ♄ 36′ 29″

5ʰ 53′ 47″ ♄ in hor.
59 29 St. ν ♏ in h. auſtr. ♄ 36′ 33″
6 3 52 ♄ diſt. a β ♏ 56 25.

Jan. 19 mane
4ʰ 59′ 22″ ♄ in hor.
5 4 4 St. ν ♏ in h. auſtr. ♄ 33′ 50″
5 19 22 ♄ in hor.
24 4 St. ν ♏ in h. auſtr. ♄ 33′ 47″
5 26 15 ♄ in hor.
30 58 St. ν ♏ in h. auſtr. ♄ 33′ 47″.

Eod. mane cœpi compar. ♄ᵘᵐ cum ſtella β ♏, ut ſequitur:

Jan. 19 mane ♄ cum β ♏
5ʰ 35′ 6″ St. β ♏ in hor.
36 57 ♄ in h. boreal. ſtellâ 52′ 28″
5 39 3 St. β ♏ in hor.
40 54 ♄ in h. boreal. ſtellâ 52′ 28″.

5^h 43′ 20″ St. in hor.
45 11 ♄ in h. boreal. ſtellâ 52′ 28″
5 51 26 ♄ diſt. a β ♏ 58 50.

Jan. 21 mane
6^h 3′ 30″ St. in hor.
6 1 ♄ in h. boreal. ſtellâ 50′ 34″
6 12 48 St. in hor.
15 19 ♄ in h. boreal. ſtellâ 50′ 36″
6 19 45 St. in hor.
22 15 ♄ in h. boreal. ſtellâ 50′ 36″
6 27 29 St. in hor.
30 0 ♄ in h. boreal. ſtellâ 50′ 41″ dub.
6 36 23 ♄ diſt. a β ♏ 1° 1′ 42″.

Jan. 22 mane
4^h 54′ 6″ ♄ diſt. a β ♏ 1° 3′ 26″
4 57 49 ♄ diſt. a ν ♏ 1° 1′ 59″
6 29 44 ♄ diſt. a ν ♏ 1° 1′ 44″

6^h 34′ 4″ ♄ diſt. a β ♏ 1° 3′ 52″.

Jan. 25 mane
5^h 3′ 5″ St. β in hor.
6 48 ♄ in h. boreal. ſtellâ 47′ 22″
5 9 42 St. β in hor.
13 15½ ♄ in h. boreal. ſtellâ 47′ 22″
5 15 39 St. β in hor.
19 21 ♄ in h. boreal. ſtellâ 47′ 24″.

Jan. 27 mane
4^h 38′ 51½″ St. β in hor.
43 9 ♄ in h. boreal. ſtellâ 43′ 25″
4 45 50 St. β in hor.
50 7 ♄ in h. boreal. ſtellâ 43′ 25″
4 52 31 St. β in hor.
56 47½ ♄ in h. boreal. ſtellâ 43′ 27″.

Febr. 1 mane ♄ cum ν ♏.

$4^h\ 9'\ 26''$ ♄ in hor.

10 22 St. ν ♏ in h. auſtr. ♄ $23'\ 56''$

4 13 19 ♄ in hor.

14 14 St. ν ♏ in h. auſtr. ♄ $24'\ 2''$

4 16 47 ♄ in. hor.

17 42 St. ν ♏ in h. auſtr. ♄ $23'\ 59''$

4 20 54 ♄ diſt. a ν ♏ 27 19.

Febr. 5 mane ♄ cum β ♏.

$5^h\ 10'\ 0''$ St. β in hor.

16 36 ♄ in h. boreal. ſtellâ $40'\ 5''$

5 18 23 St. β in hor.

25 0 ♄ in h. boreal. ſtellâ $40'\ 9''$

5 31 13 St. β in hor.

37 49 ♄ in h. boreal. ſtellâ $40'\ 20''$

5 39 31 St. β in hor.

46 8 ♄ in h. boreal. ſtellâ $40'\ 14''$.

Febr. 10 mane

$5^h\ 28'\ 2''$ St. β in hor.

35 46 ♄ in h. boreal. ſtella $37'\ 42''$

5 38 14 St. β in hor.

45 57 ♄ in h. boreal. ſtellâ $37'\ 44''$.

Nubes.

Febr. 11 mane

$4^h\ 25'\ 3''$ St. β in hor.

32 57½ ♄ in h. boreal. ſtellâ $37'\ 25''$

4 35 51 St. β in hor.

43 46 ♄ in h. boreal. ſtellâ $37'\ 5''$ err.

4 47 55 St. β in hor.

55 49 ♄ in h. boreal. ſtellâ $37'\ 20''$

4 57 52 St. β in hor.

5 5 47 ♄ in h. boreal. ſtellâ $37'\ 23''$

5 10 19 St. β in hor.

18 13 ♄ in h. boreal. ſtellâ $37'\ 19''$.

Tum comparatæ inter ſe ſtellæ β & ν ♏.

5^h 20′ 58″ β in hor.
27 31 ν in h. boreal. ſtellâ β 18′ 26″
5 43 55 β in hor.
50 27 ν in h. boreal. ſtellâ β 18′ 20″
5 53 10 β in hor.
59 42 ν in h. boreal. ſtellâ β 18′ 31″
6 8 0 β ♍ diſt. a ſtel. ω ♍ borealiore duarum, quæ ibi ſunt 54′ 57″.
6 12 0 Diſtant inter ſe duæ ſtellæ ω ♍ 14′ 14″. Dies ſequentes nubibus impediti, & nivibus.

Febr. 21 mane ƀ cum ambabus ſtellis β & ν ♍.

4^h 26′ 6″ St. β in hor.
32 39 St. ν in h. bor. ſtellâ β 18′ 32″
35 39 ƀ in h. boreal. ſtellâ β 34′ 31″
4 38 35 St. β in hor.
45 9 St. ν in h. bor. ſtellâ β 18′ 33″
4^h 48′ 8″ ƀ in h. boreal. ſtellâ β 34′ 30″
4 50 16 St. β in hor.
56 49 St. ν in h. bor. ſtellâ β 18′ 32″
59 49 ƀ in h. boreal. ſtella 34′ 25″
5 1 41 St. β in hor.
8 14 St. ν in h. bor. ſtellâ β 18′ 32″
11 14 ƀ in h. boreal. ſtellâ 34′ 31″.

Febr. 28 mane ƀ cum β ♍.

4^h 12′ 13″ St. β in hor.
22 32 ƀ in h. boreal. ſtellâ 33′ 12″
4 40 14 St. β in hor.
50 31 ƀ in h. boreal. ſtellâ 33′ 25″
4 53 7 St. β in hor.
5 3 25 ƀ in h. boreal. ſtellâ 33′ 31″
5 7 49 St. β in hor.
18 7 ƀ in h. boreal. ſtellâ 33′ 9″.

Mart. 4 mane

4^h 23′ 21″ St. β in hor.
33 57 ♄ in h. boreal. ſtellâ
33′ 21″
4 37 13 St. β in hor.
47 47 ♄ in h. boreal. ſtellâ
33′ 17″
4 50 45 St. β in hor.
5 1 19 ♄ in h. boreal. ſtellâ
33′ 27″.

Mart. 7 mane

4^h 1′ 35″ St. β in hor.
12 17½ ♄ in h. boreal. ſtellâ
33′ 18″
4 14 10 St. β in hor.
24 52 ♄ in h. boreal. ſtellâ
33′ 33″
4 26 42 St. β in hor.
37 24 ♄ in h. boreal. ſtellâ
33′ 27″
4 44 8½ St. β in hor.
54 50 ♄ in h. boreal. ſtellâ
33′ 36″.

Mart. 8 mane

3^h 50′ 8″ St. β in hor.
4 0 52 ♄ in h. boreal. ſtellâ
33′ 29″
4^h 5′ 41″ St. β in hor.
16 25 ♄ in h. boreal. ſtellâ
33′ 29″
4 18 23 St. β in hor.
29 7 ♄ in h. boreal. ſtellâ
33′ 29″
4 31 15 St. β in hor.
41 59 ♄ in h. boreal. ſtellâ
33′ 25″
4 48 47 St. β in hor.
59 30½ ♄ in h. boreal. ſtellâ
33′ 27″
5 2 16 St. β in hor.
13 0 ♄ in h. boreal. ſtellâ
33′ 29″.

Sequentibus diebus cœlum nubilum.

Mart. 12 mane

3^h 52′ 29″ St. β in hor.
4 3 16 ♄ in h. boreal. ſtellâ
34′ 8″
4 5 24 St. β in hor.
16 11 ♄ in h. boreal. ſtellâ
34′ 13″
4 27 27 St. β in hor.
38 14 ♄ in h. boreal. ſtellâ
34′ 4″.

$4^h\ 41'\ 33''$ St. β in hor.
52 20 ♄ in h. boreal. ſtellâ
34′ 10″
4 54 23 St. β in hor.
5 5 10 ♄ in h. boreal. ſtellâ
34′ 15″.

Mart. 13 mane
$3^h\ 55'\ 37''$ St. β in hor.
4 6 25 ♄ in h. boreal. ſtellâ
34′ 13″.
Tum nubes toto cœlo.

Mart. 14 mane
$4^h\ 30'\ 4''$ St. β in hor.
40 51 ♄ in h. boreal. ſtellâ
34′ 33″
4 43 12 St. β in hor.
53 58 ♄ in h. boreal. ſtellâ
34′ 17″
4 56 26 St. β in hor.
5 7 12 ♄ in h. boreal. ſtellâ
34′ 29″
5 9 32 St. β in hor.
20 18 ♄ in h. boreal. ſtellâ
34′ 36″
5 22 12 St. β in hor.
32 57 ♄ in h. boreal. ſtellâ
34′ 28″

$5^h\ 35'\ 6''$ St. β in hor.
45 51½ ♄ in h. boreal. ſtellâ
34′ 32″.

Mart. 15 mane
$5^h\ 11'\ 36''$ St. β in hor.
22 20 ♄ in h. boreal. ſtellâ
34′ 33″
5 24 22 St. β in hor.
35 6 ♄ in h. boreal. ſtellâ
34′ 44″
5 37 32 St. β in hor.
48 16 ♄ in h. boreal. ſtellâ
34′ 46″.

Mart. 17 mane
$4^h\ 35'\ 2''$ St. β in hor.
45 43 ♄ in h. boreal. ſtellâ
35′ 12″
4 47 36 St. β in hor.
58 17 ♄ in h. boreal. ſtellâ
35′ 13″
5 0 41 St. β in hor.
11 22 ♄ in h. boreal. ſtellâ
35′ 12″

Mart. 18 mane poſt med. noct.
1^h 47′ 24″ St. β in hor.
58 3 ♄ in h. boreal. ſtellâ 35′ 19″
2 1 26 St. β in hor.
12 4½ ♄ in h. boreal. ſtellâ 35′ 19″.

Mart. 23 mane
3^h 58′ 15″ St. β in hor.
4 8 37 ♄ in h. boreal. ſtellâ 37′ 2″
4 13 14½ St. β in hor.
23 36 ♄ in h. boreal. ſtellâ 37′ 3″
4 25 55 St. β in hor.
36 16 ♄ in h. boreal. ſtellâ 37′ 8″
4 37 50 St. β in hor.
48 11 ♄ in h. boreal. ſtellâ 37′ 3″
4 50 12 St. β in hor.
5 0 33 ♄ in h. boreal. ſtellâ 37′ 3″.

Mart. 28 mane
3^h 16′ 30″ St. β in hor.
26 24 ♄ in h. boreal. ſtellâ 39′ 12″
3^h 51′ 26″ St. β in hor.
4 1 20 ♄ in h. boreal. ſtellâ 39′ 16″
4 3 34 St. β in hor.
13 27 ♄ in h. boreal. ſtellâ 39′ 25″
4 15 57 St. β in hor.
25 50 ♄ in h. boreal. ſtellâ 39′ 19″.

Mart. 29 mane
3^h 38′ 45″ St. β ♏ in hor.
45 18 St. ν ♏ in h. boreal. ſtellâ β 18′ 32″
48 32 ♄ in h. boreal. ſtellâ β 39′ 38″.

Non repetii obſervaturus ☾nam.

Noto autem differentias aſcenſ. & declin. ſtellarum β & ν eaſdem me obtinuiſſe hodie, quas nuper 21 Febr. licet interea Micrometrum ſemel & iterum diſſolviſſem, & fila mutaſſem argumento organum hoc ſibi probe conſtare.

April. 1 mane
4ʰ 24′ 2″ St. β in hor.
33 26 ♄ in h. boreal. ſtellâ
41′ 21″.
Deinde nubes.

April. 3 mane
4ʰ 6′ 34″ St. β in hor.
15 43 ♄ in h. boreal. ſtellâ
42′ 1″
4 29 32 St. β in hor.
38 40 ♄ in h. boreal. ſtellâ
42′ 24″
4 44 13 St. β in hor.
53 21 ♄ in h. boreal. ſtellâ
42′ 7″
4 55 47 St. β in hor.
5 5 57 ♄ in h. boreal. ſtellâ
42′ 11″
5 8 44 St. β in hor.
17 52 ♄ in h. boreal. ſtellâ
42′ 13″
5 21 41 St. β in hor.
30 49 ♄ in h. boreal. ſtellâ
42′ 17″.

April. 6 mane
3ʰ 9′ 35″ St. β in hor.
18 15 ♄ in h. boreal. ſtellâ
44′ 3″
3ʰ 32′ 57″ St. β in hor.
41 37 ♄ in h. boreal. ſtellâ
44′ 6″
3 44 13 St. β in hor.
52 53 ♄ in h. boreal. ſtellâ
44′ 6″.

April. 22 mane ♄ iterum cum ſtella ν ♏.
3ʰ 46′ 54½″ ♄ in hor.
48 6 St. ν in h. auſtral. ♄
36′ 58″.
Obſervatio tuta.

April. 26 veſpere paullo ante med. noct.
11ʰ 46′ 46″ ♄ in hor.
49 11 St. ν in h. auſtral. ♄
40′ 58″
11 51 56 ♄ in hor.
54 22 St. ν in h. auſtral. ♄
40′ 52″
11 57 11 ♄ in hor.
59 36 St. ν in h. auſtral. ♄
40′ 59″.

Maji. 2 mane

$4^h\ 14'\ 17''$ ♄ in hor.
18 8 St. ν in h. auſtral. ♄ $45'\ 28''$
4 21 37 ♄ in hor.
25 27 St. ν in h. auſtral. ♄ $45'\ 26''$
4 27 55 ♄ in hor.
31 47 St. ν in h. auſtral. ♄ $45'\ 25''$
4 33 44 ♄ in hor.
37 36 St. ν in h. auſtral. ♄ $45'\ 20''$
4 39 25 ♄ in hor.
43 16 St. ν in h. auſtral. ♄ $45'\ 32''$.

Maji. 9 mane

$2^h\ 25'\ 33''$ ♄ in hor.
31 24 St. ν in h. auſtral. ♄ $51'\ 36''$
2 37 15 ♄ in hor.
43 4 St. ν in h. auſtral. ♄ $51'\ 44''$
3 4 49 ♄ in hor.
10 39 St. ν in h. auſtral. ♄ $51'\ 52''$
3 14 8 ♄ in hor.
19 58 St. ν in h. auſtral. ♄ $51'\ 44''$.

Maji. 9 mane, ſcilicet eodem die, cœpi comparare ♄num cum ſtella χ in tibia dextra Ophiuchi, & imminebat ☍ ☉ ♄.

$3^h\ 30'\ 47''$ ♄ in hor.
51 39 St. χ in h. boreal. ♄ vacat.
3 57 34 ♄ in hor.
4 18 26½ St. χ in h. boreal. ♄ $3'\ 55''$

$9^h\ 6'\ 36''$ ♄ in hor.
29 48 St. χ in h. boreal. ♄ $3'\ 26''$
9 33 20 ♄ in hor.
56 32 St. χ in h. boreal. ♄ $3'\ 32''$.

Maji. 16 veſpere

$8^h\ 39'\ 50''$ ♄ in hor.
9 3 2 St. χ in h. boreal. ♄ $3'\ 28''$

Maji. 17 veſpere

$8^h\ 48'\ 19''$ ♄ in hor.
9 11 48 St. χ in h. boreal. ♄ $4'\ 31''$.

9^h 13′ 47″ ♄ in hor.
37 17 St. ϰ in h. boreal. ♄
4′ 22″
9 39 9 ♄ in hor.
10 2 39 St. ϰ in h. boreal. ♄
4′ 24″.

Maji. 20 mane poſt med. noct.
2^h 58′ 48″ ♄ in hor.
3 22 59 St. ϰ in h. boreal. ♄
5′ 50″.

Non licuit repetere ob vapores ſimul, & clarorem auroræ. Operatio viſa tuta. Hoc die fuit ☍ ☉ ♄. Igitur eodem die

Maji. 20 veſpere
8^h 21′ 9½″ ♄ in hor.
45 34 St. ϰ in h. boreal. ♄
7′ 4″

8^h 48′ 22″ ♄ in hor.
9 12 46 St. ϰ in h. boreal. ♄
7′ 9″
9 14 22 ♄ in hor.
38 47 St. ϰ in h. boreal. ♄
7′ 5″.

Maji. 21 veſpere
8^h 18′ 39″ ♄ in hor.
43 21 St. ϰ in h. boreal. ♄
7′ 59″
8 45 56 ♄ in hor.
9 10 38 St. ϰ in h. boreal. ♄
8′ 9″
9 12 47 ♄ in hor.
37 30 St. ϰ in h. boreal. ♄
8′ 0″.

Sept. 17 veſpere ♄ rurſum comparari cœptus cum ν ♏.

6^h 44′ 59″ ♄ in hor.
7 0 34 St. ν in h. auſtral. ♄
57′ 59″

7^h 6′ 23″ ♄ in hor.
22 1 St. ν in h. auſtral. ♄
57′ 59″.

7^h 38′ 52″ ♄ in hor.
54 26 St. in h. auſtralior ♄
58′ 1″.

Sept. 18 veſpere
6^h 20′ 5″ ♄ in hor.
35 23 St. in h. auſtralior ♄
56′ 54″
6 38 38 ♄ in hor.
53 56 St. in h. auſtralior ♄
56′ 54″
6 56 58 ♄ in hor.
7 12 17 St. in h. auſtralior ♄
56′ 54″.

Sept. 27 veſpere
6^h 6′ 56″ ♄ in hor.
19 20 St. in h. auſtralior ♄
45′ 35″
6 29 40 ♄ in hor.
42 5 St. in h. auſtralior ♄
45′ 35″
6 43 55 ♄ in hor.
56 20 St. in h. auſtralior ♄
45′ 29″
6 59 38 ♄ in hor.
7 12 1 St. in h. auſtralior ♄
45′ 35″

Sept. 28 veſpere
6^h 0′ 14″ ♄ in hor.
12 17 St. in h. auſtralior ♄
44′ 17″
6 14 35 ♄ in hor.
26 38 St. in h. auſtralior ♄
44′ 29″
6 30 45 ♄ in hor.
42 47 St. in h. auſtralior ♄
44′ 25″
6 45 0 ♄ in hor.
57 3 St. in h. auſtralior ♄
44′ 13″.

Oct. 3 veſpere
6^h 5′ 0″ ♄ in hor.
15 14 St. in h. auſtralior ♄
37′ 42″.
Deinde cum β ♏.
6 17 41 ♄ in hor.
21 24 St. β in h. auſtrior ♄
56′ 15″
6 23 34 ♄ in hor.
27 19 St. β in h. auſtrior ♄
56′ 12″.

Oct. 4 veſpere ♄ cum β.
6^h 4′ 41″ ♄ in hor.
8 0 St. β in h. auſtral. ♄ 54′ 59″
6 16 10 ♄ in hor.
19 30 St. β in h. auſtral. ♄ 54′ 57″
6 21 31½ ♄ in hor.
24 52 St. β in h. auſtral. ♄ 54′ 57″.

Oct. 5 veſpere
5^h 57′ 25″ ♄ in hor.
6 0 23 St. β in h. auſtral. ♄ 53′ 29″
6 2 28 ♄ in hor.
5 26 St. β in h. auſtral. ♄ 53′ 35″
6 11 43 ♄ in hor.
14 41 St. β in h. auſtral. ♄ 53′ 35″

6^h 16′ 34″ ♄ in hor.
19 32 St. β in h. auſtral. ♄ 53′ 32″.

Oct. 13 veſpere
5^h 54′ 47″ St. β in hor.
55 0 ♄ in h. boreal. ſtellâ β 42′ 7″.
Obſervatio unica, ſed viſa tuta.

Oct. 17 veſpere
5^h 57′ 24″ St. β in hor.
59 14 ♄ in h. boreal. ſtellâ β 36′ 18″
6 1 40 St. β in hor.
3 31 ♄ in h. boreal. ſtellâ β 36′ 29″
6 5 26 St. β in hor.
7 17 ♄ in h. boreal. ſtellâ β 36′ 21″.

Anno 1751.

Mart. 7 mane cœpi comparare $♄^{mum}$ cum ſtella ę in tibia ſiniſtra Ophiuchi. Accedebat ♄ ad ſtationem.

$5^h\ 12'\ 28''$ ♄ in hor.
29 54 St. ρ in h. auſtral. ♄ $8'\ 13''$
5 32 36 ♄ in hor.
50 0 St. ρ in h. auſtral. ♄ $7'\ 44''$.

Mart. 13 mane
$4^h\ 53'\ 42''$ ♄ in hor.
5 10 40 St. ρ in h. auſtral. ♄ $7'\ 48''$
5 16 59 ♄ in hor.
33 57 St. ρ in h. auſtral. ♄ $7'\ 36''$
5 37 39 ♄ in hor.
54 37 St. ρ in h. auſtral. ♄ $7'\ 44''$.

Mart. 14 mane
$3^h\ 17'\ 53''$ ♄ in hor.
34 47 St. ρ in h. auſtral. ♄ $7'\ 46''$
3 37 56 ♄ in hor.
54 50 St. ρ in h. auſtral. ♄ $7'\ 38''$
3 56 30 ♄ in hor.
4 13 24 St. ρ in h. auſtral. ♄ $7'\ 32''$

$4^h\ 16'\ 18''$ ♄ in hor.
33 12 St. ρ in h. auſtral. ♄ $7'\ 40''$
4 40 19 ♄ in hor.
57 13 St. ρ in h. auſtral. ♄ $7'\ 40''$.

Mart. 15 mane
$3^h\ 7'\ 36''$ ♄ in hor.
24 26 St. ρ in h. auſtral. ♄ $7'\ 42''$
3 28 $7\frac{1}{2}$ ♄ in hor.
44 58 St. ρ in h. auſtral. ♄ $7'\ 28''$
3 49 34 ♄ in hor.
4 6 $23\frac{1}{2}$ St. ρ in h. auſtral. ♄ $7'\ 40''$
4 8 54 ♄ in hor.
25 44 St. ρ in h. auſtral. ♄ $7'\ 31''$.

Mart. 16 mane
$3^h\ 57'\ 20''$ ♄ in hor.
4 14 8 St. ρ in h. auſtral. ♄ $7'\ 46''$
4 17 36 ♄ in hor.
34 23 St. ρ in h. auſtral. ♄ $7'\ 32''$.

4^h 36′ 15″ ♄ in hor.
53 1 St. ϱ in h. auſtral. ♄
7′ 39″

4 56 16 ♄ in hor.
5 13 3 St. ϱ in h. auſtral. ♄
7′ 39″

5 16 30 ♄ in hor.
33 18 St. ϱ in h. auſtral. ♄
7′ 42″

5 36 24 ♄ in hor.
53 10 St. ϱ in h. auſtral. ♄
7′ 36″.

Mart. 18 mane

4^h 20′ 44″ ♄ in hor.
37 25 St. ϱ in h. auſtral. ♄
7′ 46″

4 40 23 ♄ in hor.
57 2 St. ϱ in h. auſtral. ♄
7′ 40″

4 59 39 ♄ in hor.
5 16 19 St. ϱ in h. auſtral. ♄
7′ 40″

5 19 23 ♄ in hor.
36 3½ St. ϱ in h. auſtral. ♄
7′ 44″.

Mart. 21 mane

3^h 18′ 58″ ♄ in hor.
35 34½ St. ϱ in h. auſtral. ♄
7′ 56″

3 37 39 ♄ in hor.
54 15 St. ϱ in h. auſtral. ♄
7′ 50″

3 56 10 ♄ in hor.
4 12 46 St. ϱ in h. auſtral. ♄
7′ 48″

4 17 18 ♄ in hor.
33 53½ St. ϱ in h. auſtral. ♄
7′ 54″.

Mart. 24 mane

3^h 4′ 29″ ♄ in hor.
21 4 St. ϱ in h. auſtral. ♄
8′ 5″

4 14 47 ♄ in hor.
31 20 St. ϱ in h. auſtral. ♄
8′ 5″

4 33 35 ♄ in hor.
50 11 St. ϱ in h. auſtral. ♄
8′ 5″.

Mart. 26 mane

3^h 19′ 34″ ♄ in hor.
36 10 St. ϱ in h. auſtral. ♄
8′ 19″

3^h 57′ 36″ ♄ in hor.
4 14 12 St. ρ in h. auſtral. ♄
8′ 32″
4 16 48 ♄ in hor.
33 25 St. ρ in h. auſtral. ♄
8′ 24″
4 37 2 ♄ in hor.
53 39½ St. ρ in h. auſtral. ♄
8′ 32″.

Mart. 27 mane
4^h 15′ 48″ ♄ in hor.
32 25 St. ρ in h. auſtral. ♄
9′ 3″
4 35 40 ♄ in hor.
52 18 St. ρ in h. auſtral. ♄
8′ 38″
4 54 50 ♄ in hor.
5 11 28 St. ρ in h. auſtral. ♄
8′ 38″
5 13 52 ♄ in hor.
30 29 St. ρ in h. auſtral. ♄
8′ 44″.

Mart. 28 mane
4^h 22′ 49″ ♄ in hor.
39 28 St. ρ in h. auſtral. ♄
8′ 57″

4^h 43′ 34½″ ♄ in hor.
5 0 13 St. ρ in h. auſtral. ♄
8′ 47″
5 3 51½ ♄ in hor.
20 30 St. ρ in h. auſtral. ♄
8′ 53″.

Mart. 29 mane
2^h 56′ 46″ ♄ in hor.
3 13 26 St. ρ in h. auſtral. ♄
9′ 6″
3 17 59 ♄ in hor.
34 39 St. ρ in h. auſtral. ♄
8′ 59″
3 38 38 ♄ in hor.
55 19 St. ρ in h. auſtral. ♄
8′ 47″
4 0 1 ♄ in hor.
16 42 St. ρ in h. auſtral. ♄
8′ 57″
4 20 43 ♄ in hor.
37 24 St. ρ in h. auſtral. ♄
8′ 57″.

Mart. 31 mane
4^h 14′ 48″ ♄ in hor.
31 34 St. ρ in h. auſtral. ♄
9′ 29″.

4^h 26′ 36″ ♄ in hor.
53 13 St. ρ in h. auſtral. ♄ 9′ 19″
4 56 15 ♄ in hor.
5 13 2 St. ρ in h. auſtral. ♄ 9′ 19″.

5^h 14′ 38″ ♄ in hor.
31 32 St. ρ in h. auſtral. ♄ 9′ 46″.

April. 2 mane
4^h 35′ 56″ ♄ in hor.
52 50 St. ρ in h. auſtral. ♄ 9′ 48″
4 55 48 ♄ in hor.
5 12 42 St. ρ in h. auſtral. ♄ 4′ 46″

April. 3 mane
4^h 34′ 54″ ♄ in hor.
51 51 St. ρ in h. auſtral. ♄ 10′ 6″
4 53 44 ♄ in hor.
5 10 42 St. ρ in h. auſtral. ♄ 10′ 3″
5 14 29 ♄ in hor.
31 26½ St. ρ in h. auſtral. ♄ 10′ 7″

Anno 1752.

Jan. 18 mane cœpi comparare ♄num cum ſtella D, quæ in Zod. ſtell. Flamſt. ponitur inter pedem ſiniſtrum Ophiuchi, & arcum Sagittarii.

6^h 14′ 57″ ♄ in hor.
24 16 St. D in h. boreal. ♄ 17′ 32″.
Obſervatio tuta.

6^h 26′ 33″ ♄ in hor.
35 26 St. D in h. boreal. ♄ 18′ 9″.

Jan. 19 mane
6^h 14′ 25″ ♄ in hor.
23 21 St. D in h. boreal. ♄ 17′ 57″

Jan. 20 mane
6^h 12′ 21″ ♄ in hor.
20 49 St. D in h. boreal. ♄ 18′ 5″.

6^h 22′ 40″ ♄ in hor.
31 5 St. D in h. boreal. ♄ 18′ 9″
6 33 41 ♄ in hor.
42 7 St. D in h. boreal. ♄ 18′ 11″.

Jan. 21 mane
6^h 5′ 6″ ♄ in hor.
13 4½ St. D in h. boreal. ♄ 18′ 36″
6 16 10 ♄ in hor.
24 10 St. D in h. boreal. ♄ 18′ 40″
6 27 17 ♄ in hor.
35 17 St. D in h. boreal. ♄ 18′ 48″.

Jan. 22 mane
6^h 2′ 30″ ♄ in hor.
10 4 St. D in h. boreal. ♄ 19′ 1″
6 13 17 ♄ in hor.
20 52 St. D in h. boreal. ♄ 19′ 7″
6 23 1 ♄ in hor.
30 35 St. D in h. boreal. ♄ 19′ 5″.

Jan. 24 mane
6^h 7′ 21″ ♄ in hor.
14 6 St. D in h. boreal. ♄ 19′ 44″
6 18 55 ♄ in hor.
25 39½ St. D in h. boreal. ♄ 19′ 44″
6 29 25 ♄ in hor.
36 9½ St. D in h. boreal. ♄ 19′ 50″.

Jan. 31 mane
5^h 39′ 5″ ♄ in hor.
43 2 St. D in h. boreal. ♄ 22′ 11″
5 46 59 ♄ in hor.
50 55 St. D in h. boreal. ♄ 22′ 11″
5 54 21 ♄ in hor.
58 16 St. D in h. boreal. ♄ 22′ 3″.

Jan. 1 mane ♄ rurſum cum eadem ſtella D.
3^h 43′ 16″ ♄ in hor.
44 31 St. D in h. boreal. ♄ 19′ 13″.

$3^h\ 50'\ 30''$ ♄ in hor.
51 46 St. D in h. boreal. ♄ $19'\ 21''$
3 53 13 ♄ in hor.
54 28 St. D in h. boreal. ♄ $19'\ 21''$
3 58 17 ♄ in hor.
59 32 St. D in h. boreal. ♄ $19'\ 15''$.

Jun. 11 mane poſt med. noct.
$1^h\ 23'\ 24''$ ♄ in hor.
27 $45\frac{1}{2}$ St. D in h. boreal. ♄ $17'\ 17''$
1 32 $30\frac{1}{2}$ ♄ in hor.
36 52 St. D in h. boreal. ♄ $17'\ 17''$

$1^h\ 39'\ 16''$ ♄ in hor.
43 38 St. D in h. boreal. ♄ $17'\ 27''$.
1 47 8 ♄ in hor.
51 29 St. D in h. boreal. ♄ $17'\ 17''$.

Jun. 26 veſpere
$8^h\ 4'\ 22''$ ♄ in hor.
13 40 St. D in h. boreal. ♄ $14'\ 6''$.
8 15 20 ♄ in hor.
24 37 St. D in h. boreal. ♄ $14'\ 3''$.

§. II.

JUPITER CUM FIXIS.

Anno 1746.

Jul. 13 veſpere cœpi comparare ♃^{vem} cum ſtella ω in talo pedis dextri Ophiuchi, juxta quam ſtationem ſuam peracturus erat.

8^h

8ʰ o′ o″ Circiter a ♃ᵛᵉ ad ſtellam numerata variis vicib. 48′ 51″. 52″. 53″. 50″, eratque ſtella auſtralior ♃ᵛᵉ 12′ 12″.

Jul. 16 veſpere

8ʰ o′ o″ Circiter a ♃ᵛᵉ numerata ſemel 1′ 34″, iterum 1′ 34″, tertio 1′ 36″, eratque ſtella auſtralior ♃ 13′ 31″

8 15 o ♃ diſtabat a ſtella 25 4.

Jul. 20 veſpere circa

8ʰ o′ o″ A ♃ᵛᵉ ad ſtellam numerata ſemel 2′ 17″, iterum 2′ 19″, & tertio 2′ 19″, eratque ſtella auſtralior ♃ᵛᵉ 13′ 37″.

Jul. 21 veſpere circa

8ʰ o′ o″ A ♃ᵛᵉ ad ſtellam numerata ſemel 2′ 17″, iterum 2′ 28″, & ſtella auſtralior ♃ᵛᵉ 14′ 10″.

Jul. 23 veſpere circa

8ʰ o′ o″ A ♃ᵛᵉ ad ſtellam numerata 2′ 45″, & 2′ 44″, & tertio 2′ 44″, ſtella auſtralior ♃ᵛᵉ 14′ 29″, diſtantia ♃ᵛⁱˢ a ſtella 40′ 34″.

Jul. 24 veſpere circa

8ʰ o′ o″ A ♃ᵛᵉ ad ſtellam numerata 2′ 51″, ſemel tantum, ſed tuto ut videbatur, ſtella erat auſtralior ♃ᵛᵉ 14′ 47″.

Jul. 25 veſpere circa

8^h 0′ 0″ A ♃^{ve} ad ſtellam numerata ſemel 2′ 57″, iterum 2′ 56″, & ſtella auſtralior ♃^{ve} 14′ 45″.

Jul. 26 veſpere circa

8^h 30′ 0″ A ♃^{ve} ad ſtellam numerata ſemel 3′ 2″, iterum 3′ 0″, tertio 3′ 0″, ſtella auſtralior ♃^{ve} 14′ 29″.

Jul. 27 veſpere circa

8^h 15′ 0″ A ♃^{ve} ad ſtellam numerata ſemel 3′ 7″, iterum 3′ 7″, & ſtella auſtralior ♃^{ve} 14′ 56″, ſed quia nubes turbabant.

9 0 0 Denuo a ♃^{ve} ad ſtellam numerata ſemel 3′ 7″, iterum 3′ 7″, & ſtella auſtralior ♃^{ve} 14′ 56″, diſtantia ♃^{vis} a ſtella 46′ 35″.

Jul. 28 veſpere circa

7^h 45′ 0″ A ♃^{ve} ad ſtellam numerata bis 3′ 9″, ſemel 3′ 10″, & ſtella auſtralior ♃^{ve} 14′ 55″.

Jul. 29 veſpere circa

8^h 15′ 0″ A ♃^{ve} ad ſtellam numerata bis 3′ 14″, ſemel 3′ 13″, ſemel 3′ 15″, ſtella ſemper auſtralior ♃^{ve} 14′ 56″

9 45 0 Terræmotus admodum ſenſibilis, ſed brevis & citra damnum.

Aug. 4 veſpere circa
$9^h\ 0'\ 0''$ A ♃^{ve} ad ſtellam numerata ſemel $3'\ 16''$, bis $3'\ 18''$, & ſtella auſtralior ♃^{ve} $13'\ 40''$, diſtantia ♃^{vis} a ſtella $48'\ 52''$.

Aug. 5 veſpere circa
$8^h\ 0'\ 0''$ A ♃^{ve} ad ſtellam numerata ter $3'\ 16''$, ſtella auſtralior ♃^{ve} $13'\ 18''$, diſtantia ♃^{vis} a ſtella $47'\ 33''$.
Aug. 6 nubes, 7 8 9 10 abſui ex urbe, 11 & 12 nubes.

Aug. 13 veſpere circa
$7^h\ 30'\ 0''$ A ♃^{ve} ad ſtellam numerata ſemel $2'\ 32''$, iterum $2'\ 34''$, tertio $2'\ 33''$, ſtella auſtralior ♃^{ve} $9'\ 45''$, diſtantia ♃^{vis} a ſtella $37'\ 20''$.

Aug. 14 veſpere circa
$7^h\ 15'\ 0''$ A ♃^{ve} ad ſtellam numerata ſemel $2'\ 24''$, eratque ſtella auſtralior ♃^{ve} $9'\ 3''$, diſtantia ♃^{vis} a ſtella $34'\ 40''$.
8 4 42 ♃ in horario.
7 6 Stella ω in horario auſtralior ♃^{ve} $9'\ 3''$
& immoto teleſcopio
55 43 Stella ρ Ophiuchi in hor. auſtralior ♃^{ve} 4 31.

Aug. 16 veſpere a
$7^h\ 12'\ 0''$ Uſque ad $7^h\ 43'\ 0''$ a ♃^{ve} ad ſtellam numerata ter $2'\ 1''$, eratque ſemper ſtella auſtralior ♃^{ve} $7'\ 39''$.

Aug. 18 veſpere circa
$7^{h}\ 39'\ 0''$ A ♃^{ve} ad ſtellam numerata ter $1'\ 40''$, eratque ſtella auſtralior ♃^{ve} $6'\ 17''$, & ♃ diſtans a ſtella $21'\ 33''$.

Aug. 19 veſpere circa
$7^{h}\ 4'\ 0''$ A ♃^{ve} ad ſtellam numerata ſemel $1'\ 28''$, bis $1'\ 37''$, & ſtella auſtralior ♃^{ve} $5'\ 38''$, ♃ diſtabat a ſtella $20'\ 44''$.

Aug. 20 veſpere circa
$7^{h}\ 30'\ 0''$ A ♃^{ve} ad ſtellam numerata ter $1'\ 14''$, ſtella auſtralior ♃^{ve} $4'\ 50''$, & ♃ diſtabat a ſtella $17'\ 34''$.

Aug. 22 veſpere circa
$7^{h}\ 20'\ 0''$ A ♃^{ve} ad ſtellam numerata ſemel $0'\ 45''$, iterum $0'\ 44''$, tertio $0'\ 46''$, ſtella erat auſtralior ♃^{ve} $3'\ 14''$, & ♃ diſtabat a ſtella $10'\ 42''$, ſed dubie.

Aug. 23 veſpere circa
$7^{h}\ 30'\ 0''$ A ♃^{ve} ad ſtellam numerata bis $0'\ 30''$, bis $0'\ 29''$, ſemel $0'\ 28''$, ſtella auſtralior ♃^{ve} $2'\ 19''$, diſtantia ♃^{vis} a ſtella $6'\ 43''$.

Aug. 24 veſpere circa
$7^{h}\ 0'\ 0''$ A ♃^{ve} ad ſtellam numerata ter $0'\ 14''$, ſtella auſtralior ♃^{ve} $1'\ 45''$, diſtantia ♃^{vis} a ſtella $3'\ 12''$.

Aug. 25 veſpere ♃^{ve} jam ortum prætergreſſo circa
8^h o′ o″ A ſtella ω ad ♃^{vem} numerata ter o′ 6″, & ♃ erat borealior ſtella o′ 44″, diſtantia ♃^{vis} a ſtella 1′ 40″.

Aug. 26 veſpere circa
7^h 18′ o″ A ſtella ad ♃^{vem} numerata ſemel o′ 25″, bis o′ 24″, ſemel o′ 23″, nulla unquam inter ſtellam & ♃^{vem} differentia declinationis, diſtantia ♃^{vis} a ſtella 5′ 11″.

Aug. 27 veſpere circa
7^h 15′ o″ A ſtella ad ♃^{vem} numerata ſemel o′ 43″, bis o′ 42″, eratque ♃ auſtralior ſtella o′ 36″, diſtans ab eadem 9′ 49″.

Aug. 28 veſpere circa
7^h 15′ o″ A ſtella ad ♃^{vem} numerata ter 1′ 2″, ♃ auſtralior ſtella 1′ 38″, diſtans ab eadem 14′ 25″.

Aug. 29 veſpere circa
8^h o′ o″ A ſtella ad ♃^{vem} numerata bis 1′ 22″, ♃ auſtralior ſtella 2′ 30″, diſtans ab eadem 19′ 20″.

Aug. 31 veſpere circa
7^h o′ o″ A ſtella ad ♃^{vem} numerata ter 2′ 2½″, ♃ auſtralior ſtella 4′ 39″, diſtans ab eadem 28′ 55″.

Sept. 1 veſpere circa

$7^h\ 0'\ 0''$ A ſtella ad ♃^{vem} numerata ter $2'\ 25''$, ♃ auſtralior ſtella $5'\ 53''$, diſtans ab eadem $34'\ 40''$.

Sept. 2 veſpere circa

$7^h\ 0'\ 0''$ A ſtella ad ♃^{vem} numerata ter $2'\ 47''$, auſtralior ſtella $6'\ 49''$, diſtans ab eadem $39'\ 47''$.

Anno 1747.

Febr. 12 mane cœpi comparare ♃^{vem} cum geminis ſtellis ν, quæ ſunt ſupra naſum ad oculum ſiniſtrum Sagittarii, & hodie cum occidentaliore

5^h	$23'$	$34''$	♃ in hor.	
	25	35	St. ν occ. in h. bor.	
			♃	$1'\ 39''$
5	30	0	♃ in hor.	
	32	1	St. ν occ. in h. bor.	
			♃	$1'\ 39''$
5	34	38	♃ in hor.	
	36	39½	St. ν occ. in h. bor.	
			♃	$1'\ 42''$
5	39	53	♃ in hor.	
	36	54	St. ν occ. in h. bor.	
			♃	$1'\ 40''$
5	46	4	♃ in hor.	
	48	5	St. ν occ. in h. bor.	
			♃	$1'\ 39''$
5^h	$53'$	$19''$	♃ diſt. a ſt. ν orient.	$40'\ 40''$
5	55	36	♃ diſt. a ſt. ν occid.	$28'\ 8''$.

Febr. 13 mane

5^h	$26'$	$31''$	♃ in hor.	
	27	42	St. ν occ. in h. bor.	
			♃	$1'\ 1''$
	28	38	St. ν orient. in h. bor.	
			♃	$5'\ 10''$
5	31	58½	♃ in hor.	
	33	9	St. ν occ. in h. bor.	
			♃	$0'\ 57''$.

5^h 34′ 4″ St. ν or. in h. bor. ♃ 5′ 2″

5 39 38 ♃ in hor.

40 49 St. ν occ. in h. bor. ♃ 0′ 57″

41 44 St. ν or. in h. bor. ♃ 5′ 0″

5 44 19 ♃ diſt. a ſt. ν occid. 16′ 11″

5 45 43 A ſtella ν orientalior 29′ 28″

6 0 0 Capta diſtantia ſtellarum ν 13′ 18″.

Febr. 14 mane teleſcopio 10 ped.

5^h 6′ 46″ ♃ in hor.

8 4 St. ν or. in h. bor. ♃ 4′ 36″

5 11 0 ♃ in hor.

12 17 St. ν or. in h. bor. ♃ 4′ 37″

5 17 11½ ♃ in hor.

18 28 St. ν or. in h. bor. ♃ 4′ 31″

5 41 4 ♃ in hor.

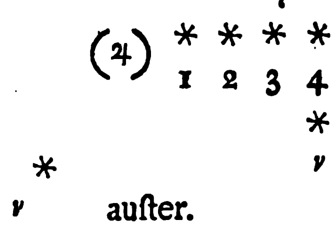
24 St. ν occ. in h. bor. ♃ 0′ 37″.

Tum capta diſtantia ♃^{vis} a ſtel. ν occ. 4′ 28″, videtur ♃ valde prope hanc ſtellam tranſiiſſe, niſi eam texerit omnino.

Febr. 15 mane teleſcopio 10 ped.

5^h 58′ 59″ ♃ diſtabat a ſtella ν occid. 6′ 52″ &

5 59 52 ♃ diſt. a ſt. ν orient. 7′ 5″.



Febr. 22 mane

6^h 4′ 48″ St. ν ort. in hor.

10 2 ♃ in horario borealior ſtella quantitate diametri ♃^{vis}, judicio oculi, quia micrometro capi non potuit.

Febr. 15 mane cœpi comparare ♃^{vem} cum ſtella o in tempore dextro capitis Sagittarii, & primum

5^h 24′ 0″ ♃ diſt. a ſt. 57′ 33″
5 42 6 ♃ in hor.
44 16 St. o in h. boreal. ♃ 48′ 45″
5 48 34 ♃ in hor.
50 46 St. o in h. boreal. ♃ 48′ 47″
5 53 57 ♃ in hor.
56 9 St. o in h. boreal. ♃ 48′ 40″
6 8 26 ♃ in hor.
10 37 St. o in h. boreal. ♃ 48′ 39″.

Febr. 26 mane
5^h 18′ 28″ ♃ in hor.
19 56 St. o in h. boreal. ♃ 48′ 0″
5 24 53 ♃ in hor.
26 21 St. o in h. boreal. ♃ 47′ 59″
5 30 57 ♃ in hor.
32 25 St. o in h. boreal. ♃ 48′ 1″.

Febr. 27 mane
5^h 27′ 16″ ♃ in hor.
59 St. o in h. boreal. ♃ 47′ 17″
5 33 54 ♃ in hor.
34 38 St. o in h. boreal. ♃ 47′ 13″
5 41 33 ♃ in hor.
42 16 St. o in h. boreal. ♃ 47′ 17″
5 49 2 ♃ in hor.
45 St. o in h. boreal. ♃ 47′ 13″
5 55 52 ♃ in hor.
56 34 St. o in h. boreal. ♃ 47′ 15″.

Febr. 28 mane
5^h 37′ 20″ St. o in hor.
26 ♃ in h. auſtral. ſtellâ 46′ 19″.
Operatio ſatis tuta.

Mart. 2 mane
5^h 39′ 10″ St. o in hor.
40 43 ♃ in h. auſtral. ſtellâ 44′ 54″.

5^h

5^h 48′ 25″ St. ☉ in hor.
49 59 ♃ in h. auſtral. ſtellâ
44′ 54″.

Mart. 7 mane
4^h 48′ 8″ St. ☉ in hor.
53 9 ♃ in h. auſtral. ſtellâ
40′ 42″
4 59 5 St. ☉ in hor.
5 4 8 ♃ in h. auſtral. ſtellâ
41′ 4″
5 8 12 St. ☉ in hor.
13 13 ♃ in h. auſtral. ſtellâ
40′ 58″
5 24 13 St. ☉ in hor.
29 15 ♃ in h. auſtral. ſtellâ
40′ 56″.

Mart. 8 mane
5^h 1′ 28″ St. ☉ in hor.
7 10 ♃ in h. auſtral. ſtellâ
40′ 1″

5^h 11′ 15″ St. ☉ in hor.
16 57 ♃ in h. auſtral. ſtellâ
40′ 15″.
Obſervatio tuta.
5 20 29 St. ☉ in hor.
26 12 ♃ in h. auſtral. ſtellâ
40′ 18″.

Mart. 9 mane
5^h 2′ 11″ St. ☉ in hor.
8 33 ♃ in h. auſtral. ſtellâ
39′ 30″
5 12 45 St. ☉ in hor.
19 9 ♃ in h. auſtral. ſtellâ
39′ 18″.
Obſervatio dubia.
5 23 34 St. ☉ in hor.
29 56 ♃ in h. auſtral. ſtellâ
39′ 20″.
Obſervatio tuta.

April. 1 mane viſus ♃ inter 2 ſtellulas, quarum occidentalior non eſt in Catalogo Britannico, in Zod. autem ſtellato Flamſt. notatur in ♑ 14° 18′ cum latit. auſtrali 0° 14″.

Stellularum orientalior in Zod. ſtell. & Catal. Britann.
ponitur in ♐ 15° 39′ 4″ cum latit. auſtr. 0° 12′ 20″

4h 47′ 6″ ♃ a ſtellula orientaliore diſtat ad occaſum 36 59
4 51 40 ♃ ab occidentaliore diſtat ad ortum 50 24.

April. 4 mane
4h 10′ 28″ ♃ diſt. a ſt. oriental. 20′ 28″
4 20 46 ♃ in hor.
22 2 St. or. in h. boreal. ♃ 10′ 48″
4 26 59 ♃ in hor.
28 15 St. or. in h. boreal. ♃ 10′ 44″
4 33 56 ♃ in hor.
35 12 St. or. in h. boreal. ♃ 10′ 46″.

April. 5 mane
4h 5′ 48″ ♃ in hor.
6 40 St. or. in h. boreal. ♃ 9′ 50″
4 12 46 ♃ in hor.
13 38 St. or. in h. boreal. ♃ 9′ 50″
4 17 55 ♃ diſt. a ſtellularum oriental. 15′ 28″.

Maji 22 mane viſus ♃ inter 2 ſtellulas, quarum occidentalior in Catal. Britann. Flamſt. notatur in ♐ 15° 39′ 4″ cum latit. bor. 0° 12′ 20″, & orientalior in ♐ 16° 45′ 0″ cum latit. bor. 0° 33′ 0″.

3h 24′ 0″ ♃ diſtabat ab occidentaliore in ortum 50′ 5″
ab orientaliore in occaſum 38 12.

Jun. 18 veſpere ♃ juxta ſtellulam, quæ in Zod. ſtellato ponitur in extremitate capillamenti Sagittarii in ♐ 14° 18″ cum

latit. auſtr. 0° 14′, cum qua comparatus eſt 1 April. tum directus, nunc retrogradus, accedens ad ☍ ☉ ♃.

10h 32′ 13″ ♃ in hor.
33 15 St. in h. auſtral. ♃ 5′ 55″
10 39 18 ♃ in hor.
40 20 St. in h. auſtral. ♃ 5′ 57″
10 46 30 ♃ in hor.
47 32 St. in h. auſtral. ♃ 5′ 57″.

10h 38′ 23″ ♃ in hor.
40 26 St. in h. auſtral. ♃ 3′ 57″
10 48 30 ♃ in hor.
50 32 St. in h. auſtral. ♃ 4′ 8″
10 56 0 ♃ in hor.
58 2 St. in h. auſtral. ♃ 3′ 59″.

Jun. 20 mane
3h 10′ 13″ ♃ in hor.
11 50 St. in h. auſtralior ♃ 4′ 47″
3 19 10 ♃ in hor.
20 47½ St. in h. auſtralior ♃ 4′ 49″
3 26 14 ♃ in hor.
27 52 St. in h. auſtralior ♃ 4′ 43″.

Eodem veſpere
10h 24′ 1″ ♃ in hor.
26 2½ St. in h. auſtralior ♃ 4′ 3″
10 30 7 ♃ in hor.
32 10 St. in h. auſtral. ♃ 4′ 4″

Jun. 26 veſpere
9h 52′ 54″ ♃ in hor.
58 2 St. jam borealior ♃ 1′ 6″
10 16 19 ♃ in hor.
21 28 St. in h. boreal. ♃ 1′ 10″
10 25 53 ♃ in hor.
31 1 St. in h. boreal. ♃ 1′ 2″
10 36 7 ♃ in hor.
41 16 St. in h. boreal. ♃ 1′ 4″.

Jul. 4 veſpere
10^h 59′ 2″ ♃ in hor.
11 8 36 St. in h. boreal. ♃ 8′ 18″
11 15 10 ♃ in hor.
24 44 St. in h. boreal. ♃ 8′ 34″
11 31 21 ♃ in hor.
40 55 St. in h. boreal. ♃ 8′ 34″.

Jul. 7 veſpere
9^h 7′ 5″ ♃ in hor.
18 15 St. in h. boreal. ♃ 10′ 57″
9 23 3 ♃ in hor.
34 12 St. in h. boreal. ♃ 10′ 50″
9 42 34 ♃ in hor.
53 44 St. in h. boreal. ♃ 10′ 49″.

Jul. 28 veſpere ♃ cum 2 ſtellis in Sagittario iiſdem, cum quibus menſe Februario.

8^h 25′ 0″ ♃ diſt. a ſtel. ν occid. 1° 3′ 58″
8 29 0 A ſt. ν ort. 52 35.

Jul. 29 veſpere
8^h 19′ 0″ ♃ ab occ. 57′ 58″
8 26 0 ♃ ab or. 47 20.

Aug. 1 veſpere
8^h 6′ 0″ ♃ ab occ. 28′ 26″
8 10 0 ♃ ab or. 24 54.

Aug. 7 veſpere
8^h 36′ 36″ ♃ in hor.
37 10 St. ν or. in h. bor. ♃ 24′ 50″

8^h 39′ 18″ ♃ in hor.
52 St. ν or. in h. bor. ♃ 24′ 48″
8 55 20 ♃ in hor.
54 St. ν or. in h. bor. ♃ 24′ 56″.

Sept. 28 veſpere
6^h 19′ 32″ ♃ ab or. 38′ 15″
6 22 39 ♃ ab occ. 29 8.

Sept. 30 veſpere
6^h 16′ 46″ ♃ ab occ. 25′ 43″
6 19 37 ♃ ab or. 32 56.

Oct. 2 veſpere
6^h 12′ 0″ ♃ ab occ. 26′ 39″
6 15 17 ♃ ab or. 29 40.

Oct. 6 veſpere
6^h 12′ 6″ ♃ ab occ. 39′ 3″
6 15 0 ♃ ab or. 33 24.

Nov. 5 veſpere ♃ rurſum cum ſtella anonyma, cum qua comparatus fuit a 18 Jun. ad 7 Jul.

5^h 24′ 45″ ♃ in hor.
31 38 St. in h. borealior ♃ 15′ 38″
5 34 45 ♃ in hor.
41 38 St. in h. borealior ♃ 15′ 52″
5 47 1 ♃ in hor.
53 54 St. in h. borealior ♃ 15′ 46″.

Nov. 8 veſpere
5^h 29′ 22″ ♃ in hor.
34 3 St. in h. borealior ♃ 12′ 55″
5 37 31 ♃ in hor.
42 12 St. in h. borealior ♃ 12′ 54″
5 46 46 ♃ in hor.
51 27 St. in h. borealior ♃ 12′ 51″.

Nov. 9 veſpere
5^h 32′ 5″ ♃ in hor.
36 1 St. in h. borealior ♃ 11′ 48″
5 38 15 ♃ in hor.
42 11 St. in h. borealior ♃ 11′ 57″
5 45 13 ♃ in hor.
49 9 St. in h. borealior ♃ 11′ 57″.

Nov. 10 veſpere
5^h 57′ 49″ ♃ in hor.
6 0 59 St. in h. borealior ♃ 10′ 44″
6 3 58 ♃ in hor.
7 8 St. in h. borealior ♃ 10′ 45″
6 9 50 ♃ in hor.
13 0 St. in h. borealior ♃ 10′ 49″.

Nov. 11 veſpere
$5^h\ 34'\ 16''$ ♃ in hor.
36 42 St. in h. borealior ♃ $9'\ 40''$
5 40 6 ♃ in hor.
42 30 St. in h. borealior ♃ $9'\ 42''$
5 44 18 ♃ in hor.
46 43 St. in h. borealior ♃ $9'\ 38''$
5 51 21 ♃ in hor.
53 47 St. in h. borealior ♃ $9'\ 38''$
5 58 50 ♃ in hor.
6 1 14 St. in h. borealior ♃ $9'\ 32''$.

Nov. 12 veſpere
$5^h\ 23'\ 33''$ ♃ in hor.
25 12 St. in h. borealior ♃ $8'\ 40''$
5 28 55 ♃ in hor.
30 34 St. in h. borealior ♃ $8'\ 28''$
5 33 33 ♃ in hor.
35 12 St. in h. borealior ♃ $8'\ 30''$
5 37 32 ♃ in hor.
39 11 St. in h. borealior ♃ $8'\ 34''$
$5^h\ 42'\ 11''$ ♃ in hor.
43 50 St. in h. borealior ♃ $8'\ 32''$.

Nov. 13 veſpere circa
$6^h\ 0'\ 0''$ Proxime per nubium hiatum numeravi a ♃ ad ſtellam bis $0'\ 51''$, eratque ſtella boreal. ♃ $7'\ 29''$.

Nov. 14 veſpere a
$5^h\ 36'\ 0''$ ad $5^h\ 45'\ 0''$ numerata a ♃^{ve} ad ſtellam bis $0'\ 6\frac{1}{2}''$, ſemel $0'\ 6''$, eratque ſtella borealior ♃^{ve} ſemel $6'\ 8''$, bis $6'\ 13''$.
5 50 0 ♃ diſt. a ſtel. $6'\ 38''$.

Nov. 15 veſpere
$6^h\ 0'\ 0''$ Et poſt, numerata a ſtella ad ♃^{vem} ter $0'\ 44''$, & ♃ ſemper auſtral. ſtellâ $5'\ 9''$
6 5 0 ♃ diſt. a ſtella $11'\ 8''$.

Anno 1748.

Mart. 24 mane comparatus ♃ cum ſtella ι ♑.

4ʰ 58′ 1″ ♃ in hor.
5 0 35 St. in h. auſtralior ♃ 39′ 3″
5 3 49 ♃ in hor.
6 24 St. in h. auſtralior ♃ vacat.
5 7 33 ♃ in hor.
10 8 St. in h. auſtralior ♃ 39′ 0″
5 15 0 ♃ in hor.
17 34 St. in h. auſtralior ♃ 39′ 9″.

Mart. 25 mane
5ʰ 5′ 54″ ♃ in hor.
7 44 St. in h. auſtralior ♃ 41′ 59″
5 13 42 ♃ in hor.
15 32 St. in h. auſtralior ♃ 42′ 6″
5 17 8 ♃ in hor.
18 58 St. in h. auſtralior ♃ 42′ 5″.

Maji 15 mane comparare cœpi ♃ᵛᵉᵐ prope ſtationem cum ſtella μ in cauda Capricorni.

3ʰ 27′ 33″ ♃ in hor.
31 58 St. μ in h. boreal. ♃ 25′ 30″
3 38 51 ♃ in hor.
43 18 St. μ in h. boreal. ♃ 25′ 28″
3 46 59 ♃ in hor.
51 24 St. μ in h. boreal. ♃ 25′ 28″
3 59 55 ♃ in hor.
4 4 20 St. μ in h. boreal. ♃ 25′ 30″.

Mart. 21 mane
3ʰ 53′ 2″ ♃ in hor.
55 44 St. μ in h. boreal. ♃ 18′ 24″
3 58 55 ♃ in hor.
4 1 37 St. μ in h. boreal. ♃ 18′ 13″
4 11 33 ♃ in hor.
14 15 St. μ in h. boreal. ♃ 18′ 24″.

4h 17′ 19″ ♃ in hor.
20 1 St. μ in h. boreal. ♃
18′ 24″.
Tum poſt pluvias.

Maji 28 mane
3h 34′ 21″ ♃ in hor.
35 36 St. μ in h. boreal. ♃
12′ 56″
3 43 57 ♃ in hor.
45 11 St. μ in h. boreal. ♃
12′ 44″
3 49 43 ♃ in hor.
50 57½ St. μ in h. boreal. ♃
12′ 44″
3 54 59 ♃ in hor.
56 14 St. μ in h. boreal. ♃
12′ 43″
3 59 38 ♃ in hor.
4 0 52 St. μ in h. boreal. ♃
12′ 44″
4 6 10½ ♃ in hor.
7 25 St. μ in h. boreal. ♃
12′ 55″.

Maji 29 mane
4h 10′ 46″ ♃ in hor.
11 50 St. μ in h. boreal. ♃
12′ 18″
4h 17′ 45″ ♃ in hor.
18 50 St. μ in h. boreal. ♃
12′ 24″
4 21 27 ♃ in hor.
22 31 St. μ in h. boreal. ♃
12′ 15″.

Maji 31 mane
4h 2′ 51″ ♃ in hor.
3 39 St. μ in h. boreal. ♃
11′ 31″
4 7 18 ♃ in hor.
8 5 St. μ in h. boreal. ♃
11′ 30″
4 11 26 ♃ in hor.
12 14 St. μ in h. boreal. ♃
11′ 29″
4 16 27 ♃ in hor.
17 14 St. μ in h. boreal. ♃
11′ 25″.

Jun. 1 mane
3h 56′ 24″ ♃ in hor.
57 4 St. μ in h. boreal. ♃
11′ 8″
4 2 46 ♃ in hor.
3 25 St. μ in h. boreal. ♃
11′ 7″.

4h

$4^{h}\ 11'\ 38''$ ♃ in hor.
12 18 St. μ in h. boreal. ♃
$11'\ 7''$
4 19 18 ♃ in hor.
57 St. μ in h. boreal. ♃
$11'\ 7''$.

Jun. 5 mane
$3^{h}\ 27'\ 39''$ ♃ in hor.
55 St. μ in h. boreal. ♃
$10'\ 7''$
3 33 55 ♃ in hor.
34 11 St. μ in h. boreal. ♃
$10'\ 11''$
3 38 38 ♃ in hor.
54 St. μ in h. boreal. ♃
$10'\ 7''$.

Jun. 6 mane
$3^{h}\ 16'\ 57''$ ♃ in hor.
17 9 St. μ in h. boreal. ♃
$10'\ 5''$
3 30 31 ♃ in hor.
44 St. μ in h. boreal. ♃
$10'\ 5''$
3 35 54 ♃ in hor.
36 6 St. μ in h. boreal. ♃
$10'\ 5''$

$3^{h}\ 43'\ 18''$ ♃ in hor.
31 St. μ in h. boreal. ♃
$10'\ 9''$
4 5 17 ♃ in hor.
29 St. μ in h. boreal. ♃
$10'\ 5''$
4 16 16 ♃ in hor.
28 St. μ in h. boreal. ♃
$10'\ 5''$.

Jun. 7 mane
$3^{h}\ 35'\ 44''$ ♃ in hor.
52 St. μ in h. boreal. ♃
$10'\ 4''$
3 39 12 ♃ in hor.
31 St. μ in h. boreal. ♃
vacat.
3 55 18 ♃ in hor.
27 St. μ in h. boreal. ♃
$10'\ 1''$
4 0 10 ♃ in hor.
18½ St. μ in h. boreal. ♃
$10'\ 0''$.

Jun. 8 mane
$2^{h}\ 49'\ 44''$ ♃ in hor.
50 St. μ in h. boreal. ♃
$10'\ 9''$.

2^h 56′ 12″ ♃ in hor.
18 St. μ in h. boreal. ♃ 10′ 9″

3 6 41 ♃ in hor.
47 St. μ in h. boreal. ♃ 10′ 12″

3 51 51 ♃ in hor.
57 St. μ in h. boreal. ♃ 10′ 12″

3 59 52 ♃ in hor.
58 St. μ in h. boreal. ♃ 10′ 15″.

4 7 55 ♃ in hor.
8 1 St. μ in h. boreal. ♃ 10′ 11″.

Jun. 9 mane

3^h 24′ 41″ ♃ in hor.
45½ St. μ in h. boreal. ♃ 10′ 16″

3 34 45 ♃ in hor.
49 St. μ in h. boreal. ♃ 10′ 16″

3 46 36 ♃ in hor.
40 St. μ in h. boreal. ♃ 10′ 15″.

Jun. 14 mane

1^h 50′ 58″ ♃ in hor.
51 5 St. μ in h. boreal. ♃ 11′ 51″.

Et idem tertio.

Jun. 15 mane

4^h 0′ 56″ ♃ in hor.
1 5½ St. μ in h. boreal. ♃ 12′ 30″

4 8 59 ♃ in hor.
9 8½ St. μ in h. boreal. ♃ 12′ 35″.

Jun. 16 mane

4^h 11′ 4″ ♃ in hor.
16 St. μ in h. boreal. ♃ 13′ 14″.

Operatione unica, ſed viſa tuta.

Jun. 17 mane

3^h 57′ 27″ ♃ in hor.
43 St. μ in h. boreal. ♃ 13′ 43″.

4^h 3′ 28″ ♃ in hor.
44 St. μ in h. boreal. ♃
13′ 43″.

Jun. 22 mane
3^h 13′ 2″ ♃ in hor.
52 St. μ in h. boreal. ♃
17′ 46″

Jun. 25 mane
3^h 43′ 53″ ♃ in hor.
45 10 St. μ in h. boreal. ♃
21′ 3″
3 46 36 ♃ in hor.
47 54 St. μ in h. boreal. ♃
21′ 9″
3 51 57½ ♃ in hor.
53 15 St. μ in h. boreal. ♃
20′ 53″
3 57 36 ♃ in hor.
58 53 St. μ in h. boreal. ♃
21′ 0″
4 2 5 ♃ in hor.
3 23 St. μ in h. boreal. ♃
20′ 53.″
4 5 36 ♃ in hor.
6 54 St. μ in h. boreal. ♃
20′ 58″.

Jun. 27 mane
2^h 50′ 57″ ♃ in hor.
52 40 St. μ in h. boreal. ♃
23′ 16″.
Dein nubes.

Jun. 30 mane
3^h 29′ 57″ ♃ in hor.
32 16½ St. μ in h. boreal. ♃
27′ 24″
3 49 40 ♃ in hor.
51 59 St. μ in h. boreal. ♃
27′ 41″
3 58 41 ♃ in hor.
4 1 1 St. μ in h. boreal. ♃
27′ 28″
4 3 9 ♃ in hor.
5 29 St. μ in h. boreal. ♃
27′ 24″.

Jul. 9 mane poſt med. noct.
0^h 58′ 14″ ♃ in hor.
1 3 5 St. μ in h. boreal. ♃
42′ 0″
1 8 25 ♃ in hor.
13 16 St. μ in h. boreal. ♃
42′ 7″.

1^h 18′ 51″ ♃ in hor.
23 43 St. μ in h. boreal. ♃ 42′ 9″.

Jul. 12 mane
4^h 4′ 24½″ ♃ in hor.
10 21 St. μ in h. boreal. ♃ 48′ 18″
4 13 9 ♃ in hor.
19 5 St. μ in h. boreal. ♃ 48′ 26″.

Jul. 13 mane
3^h 16′ 48″ ♃ in hor.
23 5 St. μ in h. boreal. ♃ 50′ 18″
3 28 9 ♃ in hor.
34 26 St. μ in h. boreal. ♃ 50′ 18″

3^h 39′ 27″ ♃ in hor.
45 44 St. μ in h. boreal. ♃ 50′ 24″
3 53 34 ♃ in hor.
59 51 St. μ in h. boreal. ♃ 50′ 28″.

Jul. 14 mane
3^h 19′ 45″ ♃ in hor.
26 25 St. μ in h. boreal. ♃ 52′ 14″
3 31 34 ♃ in hor.
38 14 St. μ in h. boreal. ♃ 52′ 17″
3 51 20 ♃ in hor.
58 1 St. μ in h. boreal. ♃ 52′ 25″
4 0 58 ♃ in hor.
7 38 St. μ in h. boreal. ♃ 52′ 18″.

Jul. 17 mane comparare cœpi ♃vem cum tribus ſtellulis in cauda Capricorni, quæ in Zod. ſtell. Flamſt. notantur litera *d*. Poſt med. noctem

1^h 9′ 35″	♃ diſt. ab auſtrina	23′ 56″	in ortum.
1 13 43	♃ diſt. a media	37 24	
1 19 23	♃ diſt. a borea	1° 4 47	

Jul. 19 mane

2^h	26′	50″	♃ diſt. a borea	57′	37″	in ortum.
2	29	19	♃ diſt. a media	26	39	
2	36	17	♃ diſt. ab auſtrina	10	38	

Eodem veſpere

10^h	36′	16″	♃ diſt. a borea	55′	3″	in ortum.
10	40	31	♃ diſt. a media	23	47	
10	45	30	♃ diſt. ab auſtrina	6	1	

Jul. 20 veſpere

9^h	52′	28″	♃ diſt. a borea	52′	24″	ſtabatque ♃ quaſi in eadem linea cum 3 ſtellis med. inter med. & auſtr.
9	57	55	♃ diſt. a media	21	32	
10	2	2	♃ diſt. ab auſtrina	3	19	

Jul. 23 veſpere

9^h	55′	17″	♃ diſt. ab auſtrina	21′	48″
9	58	47	♃ diſt. a media	27	6
10	2	25	♃ diſt. a borea	50	5
10	10	37	♃ in horario.		
	11	12	Stellarum *d* media in hor. borealior ♃^{ve}	25′	39″

10 17 37 ♃ in hor.
18 11 St. *d* in h. bor. ♃ 25′ 41″
10 29 10 ♃ in hor.
45 St. *d* in h. bor. ♃ 25′ 43″.
Deinde teleſcopio novo 10 ped. experiundi gratia

10^h 50′ 18″ ♃ in hor.
50 53 St. *d* in h. bor. ♃ 25′ 9″
10 57 55 ♃ in hor.
58 30 St. *d* in h. bor. ♃ 25′ 6″.

11^h 4′ 59″ ♃ in hor.
5 34 St. δ in h. bor. ♃ 25′ 11″
11 10 30 ♃ diſt. a δ media 26′ 17″.

Jul. 25 veſp. teleſcopio 10 ped.
9^h 37′ 10″ ♃ in hor.
39 36 St. δ auſtr. in h. b. ♃ 9′ 18″
9 42 51 ♃ in hor.
45 17 St. δ auſtr. in h. b. ♃ 9′ 24″
9 50 7 ♃ in hor.
52 32 St. δ auſtr. in h. b. ♃ 9′ 24″.
Deinde teleſcopio ordinario 6 ped.
10 13 19 ♃ in hor.
15 44 St. δ auſtr. in h. b. ♃ 9′ 17″

10^h 19′ 48″ ♃ in hor.
22 14 St. δ auſtr. in h. b. ♃ 9′ 21″
10 25 27 ♃ in hor.
27 53 St. δ auſtr. in h. b. ♃ 9′ 17″
10 32 53 ♃ diſt. ab auſtral. 36′ 31″
10 34 39 ♃ diſt. a media 37′ 32″
10 38 5 ♃ diſt. a borea 53′ 13″.

Jul. 26 veſpere
10^h 2′ 30″ ♃ in hor.
5 25 St. δ auſtr. in h. b. ♃ 11′ 41″
10 7 25 ♃ in hor.
10 18 St. δ auſtr. in h. b. ♃ 11′ 41″.

Aug. 5 veſpere comparare cœpi ♃^{vem} cum δ in cauda ♑.
9^h 42′ 23″ ♃ in hor.
53 5 St. δ in h. auſtr. ♃ 45′ 3″
9 59 25 ♃ in hor.
10 10 8 St. δ in h. auſtr. ♃ 44′ 55″

10^h 12′ 31″ ♃ in hor.
23 13 St. δ in h. auſtr. ♃ 45′ 3″
10 40 5 ♃ in hor.
50 48 St. δ in h. auſtr. ♃ 45′ 3″.

Aug. 6 veſpere
$10^h\ 50'\ 30''$ ♃ in hor.
11 1 45 St. δ in h. auſtr. ♃ 43′ 39″
11 6 4 ♃ in hor.
17 19 St. δ in h. auſtr. ♃ 43′ 33″
11 20 6 ♃ in hor.
31 21 St. δ in h. auſtr. ♃ 43′ 40″.

Aug. 10 veſpere
$8^h\ 22'\ 0\frac{1}{2}''$ ♃ in hor.
35 16 St. δ in h. auſtral. ♃ 32′ 30″
8 38 41½ ♃ in hor.
51 57 St. δ in h. auſtral. ♃ 32′ 22″
8 57 55½ ♃ in hor.
9 11 11 St. δ in h. auſtral. ♃ 32′ 30″
9 16 16½ ♃ in hor.
29 32½ St. δ in h. auſtral. ♃ 32′ 30″
9 33 1 ♃ in hor.
46 17 St. δ in h. auſtral. ♃ 32′ 30″.

Aug. 12 veſpere
$8^h\ 50'\ 1''$ ♃ in hor.
9 4 19 St. δ in h. auſtral. ♃ 27′ 34″
9 6 44 ♃ in hor.
21 2 St. δ in h. auſtral. ♃ 27′ 30″
9 23 23 ♃ in hor.
37 41 St. δ in h. auſtral. ♃ 27′ 24″.

Aug. 13 veſpere
$7^h\ 59'\ 47''$ ♃ in hor.
8 14 34½ St. δ in h. auſtral. ♃ 25′ 4″
8 19 25 ♃ in hor.
34 13½ St. δ in h. auſtral. ♃ 25′ 6″
8 37 25½ ♃ in hor.
52 13½ St. δ in h. auſtral. ♃ 25′ 6″.

Aug. 14 veſpere
$8^h\ 12'\ 25''$ ♃ in hor.
27 44 St. δ in h. auſtral. ♃ 22′ 40″
8 30 47 ♃ in hor.
46 6 St. δ in h. auſtral. ♃ 22′ 34″.

8^h 47′ 51″ ♃ in hor.
9 3 11 St. δ in h. auſtral. ♃
22′ 31″.

Aug. 15 veſpere
7^h 52′ 4″ ♃ in hor.
8 7 53 St. δ in h. auſtral. ♃
20′ 13″
8 11 53 ♃ in hor.
27 42 St. δ in h. auſtral. ♃
20′ 13″
8 32 43 ♃ in hor.
48 33 St. δ in h. auſtral. ♃
20′ 14″.

Aug. 16 veſpere
7^h 49′ 56″ ♃ in hor.
8 6 16 St. δ in h. auſtral. ♃
17′ 42″

8^h 8′ 32″ ♃ in hor.
24 51 St. δ in h. auſtral. ♃
17′ 51″
8 26 56 ♃ in hor.
43 17 St. δ in h. auſtral. ♃
17′ 44″
8 45 51 ♃ in hor.
9 2 13 St. δ in h. auſtral. ♃
17′ 47″.

Aug. 21 veſpere
7^h 34′ 43″ ♃ in hor.
53 34 St. δ in h. auſtral. ♃
6′ 1″
8 0 39 ♃ in hor.
19 29 St. δ in h. auſtral. ♃
6′ 8″
8 22 57 ♃ in hor.
41 47 St. δ in h. auſtral. ♃
6′ 9″.
Porro eodem

Aug. 21 veſpere comparare cœpi ♃^vem cum ſtella ι ♍, ad quam ſtationem ſuam peracturus erat.

8^h 52′ 39″ St. ι ♍ in hor.
58 38 ♃ in h. boreal. ſtellâ
43′ 27″

9^h 1′ 48″ St. ι ♍ in hor.
7 46½ ♃ in h. boreal. ſtellâ
44′ 6″.

9^h

9^h 9′ 56″ St. ι ♑ in hor.
15 54½ ♃ in h. boreal. ſtellâ
44′ 6″.

Aug. 22 veſpere
8^h 31′ 50″ St. ι ♑ in hor.
27 20 ♃ in h. boreal. ſtellâ
41′ 49″.

Aug. 24 veſpere
7^h 46′ 57″ St. ι ♑ in hor.
51 29 ♃ in h. boreal. ſtellâ
37′ 12″
7 54 7 St. ι ♑ in hor.
58 40 ♃ in h. boreal. ſtellâ
37′ 12″
8 1 17 St. ι ♑ in hor.
5 50 ♃ in h. boreal. ſtellâ
37′ 13″.

Aug. 27 veſpere
8^h 28′ 36″ St. ι ♑ in hor.
31 43 ♃ in h. boreal. ſtellâ
30′ 59″
8 36 9 St. ι ♑ in hor.
39 16 ♃ in h. boreal. ſtellâ
31′ 1″

8^h 47′ 49″ St. ι ♑ in hor.
50 55 ♃ in h. boreal. ſtellâ
30′ 51″
8 56 30 ♃ diſt. a ſtella ι
54′ 21″.

Aug. 28 veſpere
8^h 44′ 53″ St. ι ♑ in hor.
47 32 ♃ in h. boreal. ſtellâ
27′ 35″.

Aug. 29 veſpere
7^h 36′ 48″ St. ι ♑ in hor.
39 0 ♃ in h. boreal. ſtellâ
26′ 56″
7 41 17 St. ι ♑ in hor.
43 30 ♃ in h. boreal. ſtellâ
27′ 0″
7 47 28 St. ι ♑ in hor.
49 40 ♃ in h. boreal. ſtellâ
27′ 0″
7 12 4 St. ι ♑ in hor.
14 17 ♃ in h. boreal. ſtellâ
26′ 48″
8 16 43 St. ι ♑ in hor.
18 56 ♃ in h. boreal. ſtellâ
26′ 52″.

Aug. 30 veſpere
7^h 33′ 50″ St. ι ♑ in hor.
35 37 ♃ in h. boreal. ſtellâ 24′ 56″
7 38 38 St. ι ♑ in hor.
40 25 ♃ in h. boreal. ſtellâ 24′ 56″.
Nubes.

Sept. 1 veſpere
8^h 44′ 14″ St. ι ♑ in hor.
45 7 ♃ in h. boreal. ſtellâ 20′ 59″
8 48 37 St. ι ♑ in hor.
49 29 ♃ in h. boreal. ſtellâ 20′ 59″.

Sept. 2 veſp. Obſ. unica ſed tuta.
9^h 7′ 28″ St. ι ♑ in hor.
55 ♃ in h. boreal. ſtellâ 18′ 14″.

Sept. 3 veſp. cœlo nubilo & pluvio, & ex intervallo intonante per hiatum nubis.

9^h 50′ 54″ St. in hor.
57 ♃ in h. boreal. ſtellâ 17′ 26″.
Idemque repetitis vicibus.

Sept. 5 veſpere
6^h 46′ 1″ ♃ in hor.
44 St. in h. auſtralior ♃ 14′ 0″
6 53 57 ♃ in hor.
54 40 St. in h. auſtralior ♃ 14′ 0″
7 2 20 ♃ in hor.
3 3 St. in h. auſtralior ♃ 13′ 57″.

Sept. 6 veſpere
6^h 40′ 4″ ♃ in hor.
41 10 St. in h. auſtralior ♃ 12′ 27″
6 42 49 ♃ in hor.
43 56 St. in h. auſtralior ♃ 12′ 17″
6 48 9 ♃ in hor.
49 15½ St. in h. auſtralior ♃ 12′ 20″.

6^h 57′ 10″ ♃ in hor.
58 16½ St. in h. auſtralior ♃ 12′ 24″.

Sept. 7 veſpere
6^h 36′ 44″ ♃ in hor.
38 13 St. in h. auſtralior ♃ 10′ 42″
6 40 58 ♃ in hor.
42 27 St. in h. auſtralior ♃ 10′ 44″
6 44 26 ♃ in hor.
45 56 St. in h. auſtralior ♃ 10′ 38″
6 48 2 ♃ in hor.
49 31 St. in h. auſtralior ♃ 10′ 46″
6 52 25 ♃ in hor.
53 54 St. in h. auſtralior ♃ 10′ 46″.

Sept. 8 veſpere
6^h 40′ 7″ ♃ in hor.
41 58 St. in h. auſtralior ♃ 9′ 8″
6 43 39 ♃ in hor.
45 31 St. in h. auſtralior ♃ 9′ 8″

6^h 47′ 27″ ♃ in hor.
49 18 St. in h. auſtralior ♃ 9′ 6″
6 51 13½ ♃ in hor.
53 5½ St. in h. auſtralior ♃ 9′ 11″
6 54 53 ♃ in hor.
56 45 St. in h. auſtralior ♃ 9′ 8″.

Sept. 9 veſpere
6^h 45′ 25″ ♃ in hor.
47 38 St. in h. auſtralior ♃ 7′ 34″
6 49 59 ♃ in hor.
52 12 St. in h. auſtralior ♃ 7′ 36″
6 53 36 ♃ in hor.
55 49 St. in h. auſtralior ♃ 7′ 40″.

Sept. 10 veſpere
6^h 45′ 59″ ♃ in hor.
48 33 St. in h. auſtralior ♃ 6′ 7″
6 50 32½ ♃ in hor.
53 7 St. in h. auſtralior ♃ 6′ 7″.

6h 54′ 59″ ♃ in hor.
57 33 St. in h. auſtralior ♃ 6′ 7″.

Sept. 13 veſpere
6h 29′ 29″ ♃ in hor.
33 2 St. in h. auſtralior ♃ 1′ 46″
6 34 55 ♃ in hor.
38 28 St. in h. auſtralior ♃ 1′ 46″
6 39 54 ♃ in hor.
43 27½ St. in h. auſtralior ♃ 1′ 50″
6 47 35 ♃ in hor.
51 6 St. in h. auſtralior ♃ 1′ 50″
9 53 2 ♃ in hor.
56 35 St. in h. auſtralior ♃ 1′ 48″.

Sept. 15 veſpere
7h 47′ 0″ ♃ in hor.
51 11 St. in h. jam bor. ♃ 0′ 15″
7 54 14 ♃ in hor.
58 25 St. in h. borealior ♃ 0′ 18″
8h 5′ 11″ ♃ in hor.
9 22 St. in h. borealior ♃ 0′ 24″
8 13 42 ♃ in hor.
17 53 St. in h. borealior ♃ 0′ 16″.

Sept. 19 veſpere
7h 28′ 59″ ♃ in hor.
34 13 St. in h. borealior ♃ 4′ 31″
7 36 48 ♃ in hor.
42 2 St. in h. borealior ♃ 4′ 32″
7 43 55 ♃ in hor.
49 10 St. in h. borealior ♃ 4′ 31″.

Sept. 20 veſpere
6h 18′ 33″ ♃ in hor.
24 1½ St. in h. borealior ♃ 5′ 31″
6 26 10 ♃ in hor.
31 38 St. in h. borealior ♃ 5′ 31″
6 34 7 ♃ in hor.
39 35½ St. in h. borealior ♃ 5′ 36″.

Sept. 22 veſpere

7ʰ 31′ 9″ ♃ in hor.
37 4½ St. in h. borealior ♃
7′ 18″

7 39 39 ♃ in hor.
45 55 St. in h. borealior ♃
7′ 27″

7 47 21 ♃ in hor.
53 17 St. in h. borealior ♃
7′ 17″

7 55 51 ♃ in hor.
8 1 47 St. in h. borealior ♃
7′ 25″.

Sept. 23 veſpere

7ʰ 27′ 29″ ♃ in hor.
33 36 St. in h. borealior ♃
8′ 11″

7 35 29 ♃ in hor.
41 35 St. in h. borealior ♃
7′ 59″

7 43 7 ♃ in hor.
49 15 St. in h. borealior ♃
8 16″

7 50 40 ♃ in hor.
56 48 St. in h. borealior ♃
8′ 0″

7ʰ 59′ 4″ ♃ in hor.
8 5 11 St. in h. borealior ♃
8′ 5″.

Sept. 24 veſpere

7ʰ 17′ 33″ ♃ in hor.
23 52 St. in h. borealior ♃
8′ 50″

7 26 31½ ♃ in hor.
32 51 St. in h. borealior ♃
8′ 42″

7 35 29 ♃ in hor.
41 48 St. in h. borealior ♃
8′ 44″.

Sept. 25 veſpere

6ʰ 8′ 29″ ♃ in hor.
14 59 St. in h. borealior ♃
9′ 28″

6 16 58 ♃ in hor.
23 26 St. in h. borealior ♃
9′ 21″

6 25 37 ♃ in hor.
32 6 St. in h. borealior ♃
9′ 25″.

Sept. 26 veſpere

$7^h\ 24'\ 45''$ ♃ in hor.
31 24 St. in h. borealior ♃
9′ 50″
7 56 4 ♃ in hor.
8 2 44 St. in h. borealior ♃
10′ 2″
8 24 13 ♃ in hor.
30 53 St. in h. borealior ♃
10′ 5″.

Sept. 27 veſpere

$6^h\ 12'\ 25''$ ♃ in hor.
19 12 St. in h. borealior ♃
10′ 38″
6 21 13 ♃ in hor.
28 1 St. in h. borealior ♃
10′ 39″
6 30 41 ♃ in hor.
37 28 St. in h. borealior ♃
10′ 27″
6 40 54 ♃ in hor.
47 43 St. in h. borealior ♃
10′ 38″
6 50 15 ♃ in hor.
57 2 St. in h. borealior ♃
10′ 29″.

Sept. 29 veſpere

$7^h\ 21'\ 34''$ ♃ in hor.
28 36 St. in h. borealior ♃
11′ 27″.
Nubes.

Sept. 30 veſpere

$7^h\ 3'\ 7''$ ♃ in hor.
10 16 St. in h. borealior ♃
11′ 49″
7 15 18 ♃ in hor.
22 27 St. in h. borealior ♃
12′ 0″
7 24 42½ ♃ in hor.
31 54 St. in h. borealior ♃
11′ 51″
7 35 2 ♃ in hor.
42 12 St. in h. borealior ♃
11′ 53″
7 45 2 ♃ in hor.
52 12 St. in h. borealior ♃
11′ 52″
7 56 15 ♃ in hor.
8 3 26 St. in h. borealior ♃
11′ 52″.

Oct. 5 veſpere

7h	17′	5″	♃ in hor.
	24	36	St. in h. borealior ♃ 12′ 56″
7	27	14	♃ in hor.
	34	43	St. in h. borealior ♃ 12′ 56″
7	37	0	♃ in hor.
	44	31	St. in h. borealior ♃ 12′ 56″
7	51	1	♃ in hor.
	58	31	St. in h. borealior ♃ 12′ 54″
8	2	2	♃ in hor.
	9	33	St. in h. borealior ♃ 12′ 58″.

Oct. 6 veſpere

5h	47′	54″	♃ in hor.
	55	27	St. in h. borealior ♃ 12′ 58″
5	58	4	♃ in hor.
6	5	37	St. in h. borealior ♃ 12′ 54″
6	7	37	♃ in hor.
	15	11	St. in h. borealior ♃ vacat.
6	17	13	♃ in hor.
	24	47	St. in h. borealior ♃ 12′ 56″.

Oct. 7 veſpere

7h	24′	1″	♃ in hor.
	31	34	St. in h. borealior ♃ 12′ 48″
7	34	17	♃ in hor.
	41	50	St. in h. borealior ♃ 12′ 53″
7	54	53	♃ in hor.
8	2	26	St. in h. borealior ♃ 13′ 0″
8	6	3	♃ in hor.
	13	37	St. in h. borealior ♃ 12′ 58″
8	16	1	♃ in hor.
	23	33	St. in h. borealior ♃ 12′ 58″.

Oct. 8 veſpere

7h	29′	41″	♃ in hor.
	37	15	St. in h. borealior ♃ 12′ 50″
7	40	46	♃ in hor.
	48	20	St. in h. borealior ♃ 12′ 52″
7	51	2	♃ in hor.
	58	35	St. in h. borealior ♃ 12′ 51″
8	0	36	♃ in hor.
	8	9	St. in h. borealior ♃ 12′ 51″.

Oct. 9 veſpere

7ʰ 27′ 11″ ♃ in hor.
34 45 St. in h. borealior ♃
12′ 50″

7 40 50 ♃ in hor.
48 23 St. in h. borealior ♃
12′ 46″

7 50 57 ♃ in hor.
58 31 St. in h. borealior ♃
12′ 50″

8 0 47 ♃ in hor.
8 20 St. in h. borealior ♃
12′ 50″.

Oct. 13 veſpere

7ʰ 19′ 28½″ ♃ in hor.
26 52 St. in h. borealior ♃
11′ 41″

7 30 43 ♃ in hor.
38 6 St. in h. borealior ♃
11′ 39″

7 41 33½ ♃ in hor.
48 57 St. in h. borealior ♃
11′ 39″.

Oct. 15 veſpere

7ʰ 36′ 57″ ♃ in hor.
44 9 St. in h. borealior ♃
10′ 42″

7ʰ 46′ 52″ ♃ in hor.
54 4 St. in h. borealior ♃
10′ 37″

7 56 30 ♃ in hor.
8 3 42 St. in h. borealior ♃
10′ 46″

8 5 56 ♃ in hor.
13 8 St. in h. borealior ♃
10′ 46″.

Oct. 17 veſpere

5ʰ 53′ 40½″ ♃ in hor.
6 0 41½ St. in h. borealior ♃
9′ 35″

6 11 10 ♃ in hor.
18 11 St. in h. borealior ♃
9′ 31″

6 19 59 ♃ in hor.
26 59 St. in h. borealior ♃
9′ 35″.

Oct. 18 veſpere

5ʰ 35′ 56″ ♃ in hor.
42 49 St. in h. borealior ♃
9′ 0″

5 45 39 ♃ in hor.
52 33 St. in h. borealior ♃
8′ 52″.

5ʰ

5^{h} 57′ 1″ ♃ in hor.
6 3 54 St. in h. borealior ♃ 8′ 57″
6 6 20 ♃ in hor.
13 13 St. in h. borealior ♃ 8′ 57″.

Oct. 19 veſpere
7^{h} 26′ 37″ ♃ in hor.
33 22 St. in h. borealior ♃ 8′ 1″
7 35 22 ♃ in hor.
42 7 St. in h. borealior ♃ 8′ 13″
7 44 0 ♃ in hor.
50 44 St. in h. borealior ♃ 8′ 10″
7 53 38 ♃ in hor.
8 0 22 St. in h. borealior ♃ 8′ 9″.

Oct. 20 veſpere
5^{h} 47′ 50″ ♃ in hor.
54 23½ St. in h. borealior ♃ 7′ 21″
5 56 16 ♃ in hor.
6 2 50 St. in h. borealior ♃ 7′ 30″

6^{h} 4′ 52″ ♃ in hor.
11 25 St. in h. borealior ♃ 7′ 23″.

Oct. 21 veſpere
5^{h} 31′ 56½″ ♃ in hor.
38 21½ St. in h. borealior ♃ 6′ 38″
5 40 57 ♃ in hor.
47 22 St. in h. borealior ♃ 6′ 48″
5 49 13 ♃ in hor.
55 38 St. in h. borealior ♃ 6′ 43″.

Oct. 23 veſpere
5^{h} 27′ 27″ ♃ in hor.
33 30 St. in h. borealior ♃ 4′ 52″
5 36 58 ♃ in hor.
43 0 St. in h. borealior ♃ 4′ 50″
5 45 39 ♃ in hor.
51 42 St. in h. borealior ♃ 4′ 54″
5 53 36 ♃ in hor.
59 39 St. in h. borealior ♃ 4′ 51″.

Oct. 24 veſpere

5^h	$45'$	$15''$	♃ in hor.
	51	5	St. in h. borealior ♃ $3'\ 48''$
6	0	1	♃ in hor.
	5	52	St. in h. borealior ♃ $3'\ 51''$
6	8	24	♃ in hor.
	14	14	St. in h. borealior ♃ $3'\ 48''$
6	16	55	♃ in hor.
	22	44	St. in h. borealior ♃ $3'\ 48''$
6	25	52	♃ in hor.
	31	41	St. in h. borealior ♃ $3'\ 48''$.

Oct. 26 veſpere

5^h	$26'$	$40''$	♃ in hor.
	32	4	St. in h. borealior ♃ $1'\ 43''$
5	35	49	♃ in hor.
	41	12	St. in h. borealior ♃ $1'\ 43''$
5	43	11	♃ in hor.
	48	34	St. in h. borealior ♃ $1'\ 43''$.

Oct. 27 veſpere

5^h	$30'$	$22''$	♃ in hor.
	35	30	St. in h. borealior ♃ $0'\ 23''$
5	37	48	♃ in hor.
	42	56	St. in h. borealior ♃ $0'\ 29''$
5	44	35	♃ in hor.
	49	43	St. in h. borealior ♃ $0'\ 34''$
5	54	30	♃ in hor.
	59	37	St. in h. borealior ♃ $0'\ 29''$.

Oct. 28 veſpere

5^h	$38'$	$46''$	♃ in hor.
	43	39	St. in h. rurſum auſtr. ♃ $0'\ 23''$
5	46	25	♃ in hor.
	51	18	St. in h. auſtralior ♃ $0'\ 23''$
5	53	5	♃ in hor.
	57	57	St. in h. auſtralior ♃ $0'\ 23''$
6	4	56	♃ in hor.
	9	49	St. in h. auſtralior ♃ $0'\ 27''$.

6^h 13′ 41″ ♃ in hor.
18 34 St. in h. auſtralior ♃
0′ 23″.

Oct. 29 veſpere
5^h 29′ 14″ ♃ in hor.
33 51 St. in h. auſtralior ♃
1′ 49″
5 35 22 ♃ in hor.
39 59 St. in h. auſtralior ♃
1′ 37″
5 41 51 ♃ in hor.
46 28 St. in h. auſtralior ♃
1′ 38″
5 47 52 ♃ in hor.
52 29 St. in h. auſtralior ♃
1′ 41″.

Oct. 30 veſpere
5^h 46′ 13″ ♃ in hor.
50 32 St. in h. auſtralior ♃
2′ 58″
5 53 20 ♃ in hor.
57 40 St. in h. auſtralior ♃
2′ 58″
5 59 31 ♃ in hor.
6 3 50 St. in h. auſtralior ♃
2′ 58″

6^h 5′ 21″ ♃ in hor.
9 41 St. in h. auſtralior ♃
2′ 54″.

Oct. 31 veſpere
5^h 26′ 23″ ♃ in hor.
30 25 St. in h. auſtralior ♃
4′ 25″
5 31 52 ♃ in hor.
35 54 St. in h. auſtralior ♃
4′ 21″
5 39 21 ♃ in hor.
43 23 St. in h. auſtralior ♃
4′ 20″
5 45 14 ♃ in hor.
49 16 St. in h. auſtralior ♃
4′ 26″.

Nov. 1 veſpere
5^h 36′ 29″ ♃ in hor.
40 12 St. in h. auſtralior ♃
5′ 50″
5 41 58 ♃ in hor.
45 41 St. in h. auſtralior ♃
5′ 42″
5 48 6 ♃ in hor.
51 49 St. in h. auſtralior ♃
5′ 56″.

5^h 53′ 26″ ♃ in hor.
57 9 St. in h. auſtralior ♃
5′ 57″.

Nov. 2 veſpere
6^h 16′ 46″ ♃ in hor.
20 9 St. in h. auſtralior ♃
7′ 22″
6 21 35 ♃ in hor.
24 58 St. in h. auſtralior ♃
7′ 25″
6 27 42 ♃ in hor.
31 5 St. in h. auſtralior ♃
7′ 27″.

Nov. 4 veſpere
6^h 9′ 31″ ♃ in hor.
12 15 St. in h. auſtralior ♃
11′ 41″
6 13 59 ♃ in hor.
16 43 St. in h. auſtralior ♃
11′ 39″
6 20 40 ♃ in hor.
23 24 St. in h. auſtralior ♃
11′ 39″.

Nov. 5 veſpere
5^h 30′ 59″ ♃ in hor.
33 23 St. in h. auſtralior ♃
13′ 15″
5 36 11 ♃ in hor.
38 34 St. in h. auſtralior ♃
13′ 15″
5 40 30 ♃ in hor.
42 52 St. in h. auſtralior ♃
13′ 15″
5 45 3 ♃ in hor.
47 27 St. in h. auſtralior ♃
13′ 18″
5 49 49 ♃ in hor.
52 12 St. in h. auſtralior ♃
13′ 18″
5 58 16 ♃ in hor.
6 0 38 St. in h. auſtralior ♃
13′ 18″.

Nov. 7 veſpere
5^h 24′ 3″ ♃ in hor.
25 40 St. in h. auſtralior ♃
15′ 32″
5 27 47 ♃ in hor.
29 26 St. in h. auſtralior ♃
15′ 26″.

5^h 32′ 19″ ♃ in hor.
33 57 St. in h. auſtralior ♃
15′ 26″
5 35 58 ♃ in hor.
37 37 St. in h. auſtralior ♃
15′ 24″
5 40 0 ♃ in hor.
41 38 St. in h. auſtralior ♃
15′ 25″
5 47 25 ♃ in hor.
49 2 St. in h. auſtralior ♃
15′ 28″.

Nov. 8 veſpere
5^h 33′ 37″ ♃ in hor.
34 53 St. in h. auſtralior ♃
17′ 11″
5 37 24 ♃ in hor.
38 39 St. in h. auſtralior ♃
17′ 15″
5 41 10 ♃ in hor.
42 25 St. in h. auſtralior ♃
17′ 15″
5 44 15 ♃ in hor.
45 29 St. in h. auſtralior ♃
17′ 16″
5 48 28 ♃ diſt. a ſtella ι
25′ 0″.

Nov. 9 veſpere
5^h 28′ 10″ ♃ in hor.
29 1 St. in h. auſtralior ♃
19′ 4″
5 34 30 ♃ in hor.
35 20 St. in h. auſtralior ♃
19′ 4″
5 37 32 ♃ in hor.
38 23 St. in h. auſtralior ♃
19′ 4″
5 40 30 ♃ in hor.
41 20 St. in h. auſtralior ♃
19′ 4″
5 44 5 ♃ diſt. a ſtella ι
22′ 40″.

Nov. 10 veſpere
5^h 18′ 19½″ ♃ in hor.
46 St. in h. auſtralior ♃
20′ 53″
5 24 55 ♃ in hor.
25 22 St. in h. auſtralior ♃
20′ 59″
5 30 18½ ♃ in hor.
45 St. in h. auſtralior ♃
20′ 59″
5 36 57 ♃ in hor.
37 23 St. in h. auſtralior ♃
20′ 57″.

Nov. 11 veſpere

$5^h\,15'\,30''$ ♃ in hor.

32 St. in h. auſtralior ♃ 22′ 55″

5 22 25 ♃ in hor.

26 St. in h. auſtralior ♃ 22′ 52″

5 28 36 ♃ in hor.

37 St. in h. auſtralior ♃ 22′ 56″

5 32 25 ♃ in hor.

26 St. in h. auſtralior ♃ 22′ 56″

5 37 35 ♃ in hor.

36 St. in h. auſtralior ♃ 22′ 55″

5 40 8 ♃ in hor.

9 St. in h. auſtralior ♃ 22′ 55″.

Nov. 12 veſpere

$5^h\,26'\,9''$ St. in hor.

34 ♃ in h. boreal. ſtellâ 25′ 0″

5 30 33 St. in hor.

57½ ♃ in h. boreal. ſtellâ 24′ 58″

5 34 26 St. in hor.

50½ ♃ in h. boreal. ſtellâ 24′ 56″

$5^h\,38'\,32''$ St. in hor.

57 ♃ in h. boreal. ſtellâ 24′ 56″

5 42 30 St. in h.

55 ♃ in h. boreal. ſtellâ 25′ 1″.

Nov. 15 veſpere

$5^h\,29'\,20''$ St. in hor.

31 6 ♃ in h. boreal. ſtellâ 31′ 21″

5 34 17 St. in hor.

36 4 ♃ in h. boreal. ſtellâ 31′ 15″

5 38 4 St. in hor.

39 51 ♃ in h. boreal. ſtellâ 31′ 15″

5 41 37 St. in hor.

43 23 ♃ in h. boreal. ſtellâ 31′ 23″.

Nov. 18 veſpere

$5^h\,17'\,45''$ St. in hor.

21 0 ♃ in h. boreal. ſtellâ 37′ 55″

5 22 34 St. in hor.

25 49 ♃ in h. boreal. ſtellâ 37′ 54″.

5ʰ 27′ 52″ St. in hor.
31 6 ♃ in h. boreal. ſtellâ
37′ 57″
5 36 15 St. in hor.
39 30 ♃ in h. boreal. ſtellâ
37′ 55″.

Nov. 19 veſpere
5ʰ 16′ 49″ St. in hor.
20 34 ♃ in h. boreal. ſtellâ
40′ 14″
5 24 4 St. in hor.
27 48 ♃ in h. boreal. ſtellâ
40′ 23″
5 29 43 St. in hor.
33 28 ♃ in h. boreal. ſtellâ
40′ 18″.
Et per occaſionem
5 43 7 ♃ in hor.
57 14 St. γ ♑ in h. auſtr. ♃
34′ 27″.

Nov. 21 veſpere
5ʰ 15′ 19″ St. ι ♑ in hor.
20 7 ♃ in h. auſtral. ſtellâ
45′ 4″
5 23 38 St. ι ♑ in hor.
28 26 ♃ in h. auſtral. ſtellâ
45′ 3″

5ʰ 39′ 31″ St. ι ♑ in hor.
44 18 ♃ in h. auſtral. ſtellâ
45′ 13″
5 46 54 St. ι ♑ in hor.
51 41 ♃ in h. auſtral. ſtellâ
45′ 7″.
Et per occaſionem
5 57 31 ♃ in hor.
6 10 35 St. γ ♑ in h. auſtr. ♃
38′ 53″
17 36 St. δ ♑ in h. auſtr. ♃
7′ 11″.

Nov. 22 veſpere
5ʰ 19′ 46″ St. ι ♑ in hor.
25 3 ♃ in h. auſtral. ſtellâ
47′ 37″
37 36 St. γ ♑ in h. auſtral.
ſtellâ ι 6′ 7″
44 35 St. δ ♑ in h. auſtral.
ſtellâ ι 37′ 59″.
Operatio non repetita, viſa nihilominus ſatis tuta.

Dec. 1 veſpere
5ʰ 54′ 18″ ♃ in hor.
6 8 36 St. δ ♑ in h. auſtr. ♃
34′ 8″.
Operatio unica ſed tuta.

Dec. 19 veſpere ♃ cum 3 ſtellis *d* in cauda ♑.

$5^h\ 31'\ 2''$ ♃ diſtabat ab auſtrina $17'\ 47''$

5 35 40 ♃ diſtabat a media 27 59

5 38 54 ♃ diſtabat a borea 57 53.

Dec. 20 veſpere cœpi comparare ♃^{vem} cum ſtella μ ♑.

$5^h\ 8'\ 0''$ ♃ in hor.

15 38 St. in h. borealior ♃ $53'\ 56''$

5 43 7 ♃ in hor.

50 45 St. in h. borealior ♃ $53'\ 48''$

5 54 21 ♃ in hor.

6 1 58 St. in h. borealior ♃ $53'\ 58''$.

Dec. 21 veſpere

$5^h\ 8'\ 33''$ ♃ in hor.

15 25 St. in h. borealior ♃ $50'\ 13''$

5 18 33 ♃ in hor.

25 23 St. in h. borealior ♃ $50'\ 26''$

5 28 2 ♃ in hor.

34 53 St. in h. borealior ♃ $50'\ 19''$

5 36 47 ♃ in hor.

43 40 St. in h. borealior ♃ $50'\ 9''$.

Dec. 23 veſpere

$5^h\ 19'\ 23''$ ♃ in hor.

24 42 St. in h. borealior ♃ $42'\ 39''$

5 26 25 ♃ in hor.

31 44 St. in h. borealior ♃ $42'\ 40''$

5 34 12 ♃ in hor.

39 31 St. in h. borealior ♃ $42'\ 43''$.

Dec. 27 veſpere

$5^h\ 25'\ 9''$ ♃ in hor.

27 21 St. in h. borealior ♃ $27'\ 9''$

5 35 48 ♃ in hor.

37 59 St. in h. borealior ♃ $27'\ 4''$

5 44 32 ♃ in hor.

46 42 St. in h. borealior ♃ $27'\ 4''$.

5^h

5^h 48′ 33″ ♃ in hor.
50 44 St. in h. borealior ♃ 27′ 4″

5^h 54′ 12″ ♃ diſt. a ſtella μ 41′ 27″.

Anno 1749.

Jan. 1 veſpere cœpi comparare ♃^{rem} cum ſtella ι Aquarii.

5^h 52′ 8″ ♃ in hor.
6 3 31 St. in h. auſtralior ♃ 14′ 35″

6 6 25 ♃ in hor.
17 48 St. in h. auſtralior ♃ 14′ 35″

6 19 1 ♃ in hor.
30 23 St. in h. auſtralior ♃ 14′ 35″.

Jan. 3 veſpere
5^h 16′ 54″ ♃ in hor.
26 40 St. in h. auſtralior ♃ 22′ 46″

5 28 44 ♃ in hor.
38 28 St. in h. auſtralior ♃ 22′ 46″

5 40 47 ♃ in hor.
50 33 St. in h. auſtralior ♃ 22′ 46″

5^h 59′ 42″ ♃ in hor.
6 9 26 St. in h. auſtralior ♃ 22′ 46″.

Jan. 4 veſpere
5^h 26′ 33″ ♃ in hor.
35 28 St. in h. auſtralior ♃ 26′ 58″

5 37 34 ♃ in hor.
46 29 St. in h. auſtralior ♃ 26′ 56″

5 49 46 ♃ in hor.
58 41 St. in h. auſtralior ♃ 26′ 52″

6 12 21 ♃ in hor.
21 16 St. in h. auſtralior ♃ 26′ 56″.

Jan. 5 veſpere

5^h 20′ 33″ ♃ in hor.
28 39 St. in h. auſtralior ♃ 31′ 6″
5 30 10 ♃ in hor.
38 16 St. in h. auſtralior ♃ 31′ 7″
5 41 20 ♃ in hor.
49 26 St. in h. auſtralior ♃ 31′ 7″.

Jan. 7 veſpere

5^h 22′ 28″ ♃ in hor.
28 53 St. in h. auſtralior ♃ 39′ 54″
5 31 8 ♃ in hor.
37 33 St. in h. auſtralior ♃ 39′ 47″
5 39 42 ♃ in hor.
46 7 St. in h. auſtralior ♃ 39′ 47″
5 48 7 ♃ in hor.
54 32 St. in h. auſtralior ♃ 39′ 50″.

Jan. 9 veſpere

5^h 18′ 2″ ♃ in hor.
22 47 St. in h. auſtralior ♃ 48′ 39″
5^h 26′ 56″ ♃ in hor.
31 40 St. in h. auſtralior ♃ 48′ 36″
5 33 26 ♃ in hor.
38 12 St. in h. auſtralior ♃ 48′ 29″
5 39 58 ♃ in hor.
44 42 St. in h. auſtralior ♃ 48′ 38″.

Jan. 10 veſpere

5^h 52′ 35″ ♃ in hor.
56 26 St. in h. auſtralior ♃ 53′ 14″
5 59 1 ♃ in hor.
6 2 52 St. in h. auſtralior ♃ 53′ 14″
6 4 5 ♃ in hor.
7 56 St. in h. auſtralior ♃ 53′ 14″
6 11 7 ♃ in hor.
14 58 St. in h. auſtralior ♃ 53′ 13″.

Jan. 27 veſpere ♃ cum ſtella σ in coxendice ſiniſtra Aquarii.

5ʰ 58′ 3″ ♃ in hor.
6 10 30 St. in h. borealior ♃
54′ 44″.

5ʰ 47′ 33″ ♃ in hor.
58 14 St. in h. borealior ♃
39′ 36″.

Jan. 30 veſpere
5ʰ 34′ 1″ ♃ in hor.
44 44 St. in h. borealior ♃
39′ 35″

Jan. 31 veſpere
5ʰ 24′ 3″ ♃ in hor.
23 52 St. in h. borealior ♃
34′ 51″
5 38 22 ♃ in hor.
48 20 St. in h. borealior ♃
34′ 50″.

Sept 10 veſpere cœpi comparare ♃ᵛᵉᵐ cum ſtella maxime orientali, & maxime borea, ſecundum Eclipticam in trapezoide, quod eſt poſt Aquarium ad ortum infra Piſcem auſtrinum.

9ʰ 0′ 56″ ♃ in hor.
8 15 St. in h. auſtralior ♃
41′ 40″
9 22 48 ♃ in hor.
30 8 St. in h. auſtralior ♃
41′ 40″.

Sept. 12 veſpere
8ʰ 23′ 52″ ♃ in hor.
32 6 St. in h. auſtralior ♃
35′ 28″

8ʰ 37′ 53″ ♃ in hor.
46 9 St. in h. auſtralior ♃
35′ 24″
8 51 22 ♃ in hor.
59 38 St. in h. auſtralior ♃
35′ 20″
9 4 3 ♃ in hor.
12 17 St. in h. auſtralior ♃
35′ 20″.

Sept. 13 veſpere
8h 19′ 24″ ♃ in hor.
28 7 St. in h. auſtralior ♃
32′ 5″
8 31 34 ♃ in hor.
40 18 St. in h. auſtralior ♃
31′ 57″
8 42 40 ♃ in hor.
51 23 St. in h. auſtralior ♃
32′ 1″.

Sept 16 veſpere
8h 32′ 35″ ♃ in hor.
42 47 St. in h. auſtralior ♃
22′ 31″
8 45 54 ♃ in hor.
56 8 St. in h. auſtralior ♃
22′ 21″
9 2 17 ♃ in hor.
12 29 St. in h. auſtralior ♃
22′ 25″.

Sept. 17 mane
4h 2′ 9″ ♃ in hor.
12 31 St. in h. auſtralior ♃
21′ 29″
4h 14′ 50″ ♃ in hor.
25 12 St. in h. auſtralior ♃
21′ 25″.

Eodem 17 veſpere
8h 13′ 17″ ♃ in hor.
23 58 St. in h. auſtralior ♃
19′ 11″
8 27 19 ♃ in hor.
38 11 St. in h. auſtralior ♃
19′ 7″
8 40 12 ♃ in hor.
50 54 St. in h. auſtralior ♃
19′ 13″.

Sept. 18 mane
3h 54′ 45″ ♃ in hor.
4 5 42 St. in h. auſtralior ♃
18′ 13″.
Operatio tuta.

Incidit autem in D. 16 Sept. veſpere ☍ ☉ ♃, & captæ diebus 16 & 17 Sept. utriuſque altitudines correſpondentes, ut ſequitur:

Sept. 16 mane	alt. ⊙	veſpere	mer. non corr.
$9^h\ 11'\ 50''$	$38^\circ\ 0'$		
— 15 4	— 30	$2^h\ 35'\ 52''$	$11^h\ 53'\ 51''$
— 18 20	39 0	2 32 38	— — 50
— 21 35	— 30	2 29 27	— — 53½
— 24 53	40 0	2 26 10	— — 52½
— 28 16	— 30	2 22 52	— — 52½
— 31 34	41 0	2 19 26	— — 51
— 35 5	— 30	2 16 11	— — 52½
— 38 30	42 0	2 12 40	— — 52½
		2 9 10	— — 50.
Numerus arithmetice medius			11 53 51 40‴
Correctio addenda			12 30
⊙ in meridie correcte			11 54 4 10.
Sept. 17 mane	alt. ⊙	veſpere	mer. non corr.
$9^h\ 7'\ 1''$	$37^\circ\ 0'$	$2^h\ 40'\ 2''$	$11^h\ 53'\ 31½''$
— 10 10	— 30	2 36 57	— — 33½
— 13 27	38 0	2 33 36	— — 31½
— 16 42	— 30	2 30 27	— — 34½
— 19 58	39 0	2 27 8	— — 33
— 23 12	— 30	2 23 52	— — 32
— 26 32	40 0	2 20 32	— — 32
— 30 1	— 30	2 17 8	— — 34½
— 33 19	41 0	2 13 45	— — 32
— 36 32	— 30	2 10 12	— — 32.
Numerus arithm. medius			11 53 32 36‴
Correctio addenda			12 45
⊙ in meridie correcte			11 53 45 21.
Acceleravitque pendulum ſupra motum medium Solis ab heri			— — 3 0.

Porro alt. ☉ ſupra eſt altitudo limbi ſuperioris, ſicut infra alt. ♃^{vis} eſt altitudo centri Jovis.

Sept. 16 veſp.	alt. ♃	17 mane	culm. ♃ non corr.
8^h 8′ 46″	22° 0′	3^h 41′ 29″ d.	11^h 55′ 7½″ d.
— 14 37	23 0	3 35 42	— — 9½
— 17 31	23 30	3 32 48	— — 9½
— 20 29	24 0	3 29 48	— — 8½
— 23 34	— 30	3 26 47	— — 10½
— 26 17	25 0	3 23 53	— — 10.
Numerus arithm. medius eſto			11 55 8 36‴
Correctio addenda			— — 2 4
♃ in merid. correcte			11 55 10 40.
Sept. 17 veſp.	alt. ♃	18 mane	culm. ♃ non corr.
9^h 6′ 25″	32° 0″	2^h 35′ 7″	11^h 50′ 46″
— 9 52 d.	— 30	2 31 35	— — 43½ corr.
— 13 14	33 10	2 28 20	— — 47
— 16 47	— 30	2 24 47	— — 47
— 20 6	34 0	2 21 25	— — 45½
— 23 51	34 30	2 17 44	— — 47½
— 27 47	35 0	2 14 15	— — 46.
Numerus arithm. medius eſto			11 50 46 20‴
Correctio addenda			— — 2 0
♃ in meridiano correcte			11 50 48 20.

Anno 1750.

Aug. 20 mane cœpi comparare ♃^{vem} cum ſtella, quæ in Zod. ſtell. Flamſt. ponitur in margine dextro ungulæ pedis ſiniſtri poſterioris, Arietis in ♉ 6° 17′ cum latit auſtr. 2° 45′; nempe ad annum illum 1690.

1^h	9′	59″	♃ in hor.
	18	30	St. in h. auſtralior ♃ 42′ 5″
1	21	5	♃ in hor.
	29	37	St. in h. auſtralior ♃ 42′ 1″
1	33	12	♃ in hor.
	41	44	St. in h. auſtralior ♃ 42′ 1″
	51	3	St. alia ſequens in pede dextro poſteriore in h. auſtralior ♃ 40′ 14″.

Aug. 26 mane

2^h	40′	14″	♃ in hor.
	48	34	St. in h. auſtralior ♃ vacat.
3	4	23	♃ in hor.
	12	43	St. in h. auſtralior ♃ vacat.

Aug. 27 mane

2^h	12′	58″	♃ in hor.
	21	16	St. in h. auſtralior ♃ 41′ 18″.

Non repetii properans ad Obſervationem ☾ⁱˢ, viſa tamen hæc ipſa tuta.

Sept. 21 mane

9^h	29′	18″	♃ in hor.
	42	10	St. in h. auſtral. ♃ 12′ 25″
9	46	23	♃ in hor.
	59	16	St. in h. auſtral. ♃ 12′ 25″
10	2	47	♃ in hor.
	15	40	St. in h. auſtral. ♃ 12′ 25″
10	17	14	♃ in hor.
	30	7	St. in h. auſtral. ♃ 12′ 25″.

Oct. 22 mane comparare cœpi ♃ᵛᵉᵐ cum ſtella ξ, quæ eſt in extremo articulo pedis dextri anterioris Arietis, & imminebat ☍ ☉ ♃.

3^h	27′	50″	♃ in hor.
	42	42	S. in h. auſtralior ♃ 51′ 2″
4^h	11′	4″	♃ in hor.
	25	56	St. in h. auſtralior ♃ 51′ 0″.

4^h 30′ 57″ ♃ in hor.
45 49½ St. in h. auſtralior ♃
51′ 2″.

Eodem 22 veſpere
7^h 39′ 2″ ♃ in hor.
54 15 St. in h. auſtralior ♃
49′ 10″
7 58 13 ♃ in hor.
8 13 26 St. in h. auſtralior ♃
49′ 12″
8 15 2 ♃ in hor.
31 17 St. in h. auſtralior ♃
49′ 2″.

Oct. 23 mane
4^h 4′ 1″ ♃ in hor.
19 25 St. in h. auſtralior ♃
vacat.
4 23 19 ♃ in hor.
38 45 St. in h. auſtralior ♃
48′ 12″
4 40 52 ♃ in hor.
56 17 St. in h. auſtralior ♃
48′ 4″
4 58 33 ♃ in hor.
5 14 0 St. in h. auſtralior ♃
48′ 4″.

Eodem 23 veſpere
8^h 1′ 11″ ♃ in hor.
16 58 St. in h. auſtralior ♃
46′ 19″.
8 20 36 ♃ in hor.
36 22 St. in h. auſtralior ♃
46′ 12″
8 58 54 ♃ in hor.
9 14 40 St. in h. auſtralior ♃
46′ 12″.

Oct. 24 mane
3^h 9′ 12″ ♃ in hor.
25 9 St. in h. auſtralior ♃
45′ 24″
3 46 56 ♃ in hor.
4 2 53 St. in h. auſtralior ♃
45′ 22″
4 55 48 ♃ in hor.
5 11 46 St. in h. auſtralior ♃
45′ 12″.

Eodem 24 veſpere
7^h 8′ 52″ ♃ in hor.
25 8 St. in h. auſtralior ♃
43′ 35″.

7^h

7^h 28′ 26″ ♃ in hor.
44 43 St. in h. auſtralior ♃ 43′ 29″
7 47 37 ♃ in hor.
8 3 52 St. in h. auſtralior ♃ 43′ 35″.

Oct. 25 mane
3^h 47′ 15″ ♃ in hor.
4 3 43 St. in h. auſtralior ♃ 42′ 22″

4^h 8′ 34″ ♃ in hor.
25 2 St. in h. auſtralior ♃ 42′ 22″
4 28 37 ♃ in hor.
45 6 St. in h. auſtralior ♃ 42′ 20″
4 48 11 ♃ in hor.
5 4 39 St. in h. auſtralior ♃ 42′ 20″.

Oct. 24 mane incidit ☍ ☉ ♃ igitur captæ utriuſque altitudines correſpondentes, ut ſequitur:

Oct. 23 mane	alt. ☉	veſpere	mer. non corr.
8^h 49′ 31″	25°	2^h 37′ 24″	11^h 43′ 27½″
— 53 18	—	2 33 34	— — 26
— 56 36	26	2 30 14	— — 25
9 0 28	—	2 26 23	— — 25½
— 3 56	27	2 23 0	— — 28
— 7 56	—	2 18 55	— — 25½.
Numerus arithm. medius			11 43 26 45‴
Correctio addenda			— — 14 30
☉ in merid. correcte			11 43 41 15.

Porro alt. ☉ ſunt altitudines ſuperioris, tum inferioris limbi Solis immoto verticaliter quadrante; ita commodius viſum & expeditius.

Oct. 24 mane	alt. ☉	veſpere	mer. non corr.
8h 58′ 38″	26°	2h 28′ 10″	11h 43′ 24″
9 2 32	—	2 24 16	— — 24
— 6 2	27	2 20 46	— — 24
— 10 3	—	2 16 45	— — 24
Correctio addenda			— — 14 30‴
☉ in merid. correcte			11 43 38 30
Acceleravitque pendulum ab heri			— — 5 0.

Oct. 23 veſp.	alt. ♃	24 mane	culm. ♃ non corr.
7h 56′ 16″	31°	3h 37′ 44″	11h 47′ 5″
8 12 31	34	3 21 35	— — 3
— 35 39	38	2 58 28	— — 3½
— 51 38	41	2 42 33	— — 5.
Numerus arithm. medius			11 47 4
Correctio addenda			— — 1
♃ in merid. correcte			11 47 5.

Oct. 24 veſp.	alt. ♃	25 mane	culm. ♃ non corr.
8h 3′ 5″	33°.	3h 22′ 19″	11h 42′ 42″
— 8 25	34	3 16 54	— — 41½
— 13 57	35	3 11 20	— — 38½ erron.
— 19 25	36	3 5 54	— — 41½
— 24 55	37	3 0 26	— — 40½
— 30 38	38	2 54 46	— — 42.
Numerus arithm. medius			11 42 41
Correctio addenda			— — 1
♃ in merid. correcte			11 42 42.

Dec. 19 mane comparare cœpi ♃^{vem} proximum ſtationi cum ſtella o in lino Piſcium.

5^{h} 2′ 35″ St. o in hor.
6 50 ♃ in h. boreal. ſtellâ
46′ 14″
5 9 6 St. o in hor.
13 20 ♃ in h. boreal. ſtellâ
46′ 15″
5 15 2 St. o in hor.
19 17 ♃ in h. boreal. ſtellâ
46′ 21″.

Dec. 20 veſpere
5^{h} 14′ 48″ St. o in hor.
19 1 ♃ in h. boreal. ſtellâ
46′ 27″
5 24 0 St. o in hor.
28 14 ♃ in h. boreal. ſtellâ
46′ 28″
5 36 58 St. o in hor.
41 12 ♃ in h. boreal. ſtellâ
46′ 26″.

Dec. 22 veſpere
5^{h} 20′ 25″ St. o in hor.
24 37 ♃ in h. boreal. ſtellâ
47′ 11″
5 27 49 St. o in hor.
32 1 ♃ in h. boreal. ſtellâ
46′ 59″

5^{h} 49′ 11″ St. o in hor.
53 23 ♃ in h. boreal. ſtellâ
47′ 11″.

Dec. 24 veſpere
5^{h} 9′ 2″ St. o in hor.
13 22 ♃ in h. boreal. ſtellâ
48′ 27″
5 15 8 St. o in hor.
19 28 ♃ in h. boreal. ſtellâ
48′ 27″.

Dec. 25 veſpere
4^{h} 58′ 8″ St. o in hor.
5 2 29 ♃ in h. boreal. ſtellâ
49′ 32″
5 4 20 St. o in hor.
8 41 ♃ in h. boreal. ſtellâ
49′ 32″
5 12 46 St. o in hor.
17 7 ♃ in h. boreal. ſtellâ
vacat.

Anno 1751.

Jul. 14 mane comparavi ♃^{vem} cum ſtella ω 2 in Tauro.

3^h 57′ 8″ St. ω in hor.
58 26 ♃ in h. boreal. ſtellâ 1′ 38″
3 59 58 St. ω in hor.
4 1 16 ♃ in h. boreal. ſtellâ 1′ 38″
4 2 31 St. ω in hor.
3 49 ♃ in h. boreal. ſtellâ 1′ 43″
4 5 7 St. ω in hor.
6 25 ♃ in h. boreal. ſtellâ 1′ 38″.

Jul. 16 mane
3^h 56′ 25″ St. ω in hor.
59 19 ♃ in h. boreal. ſtellâ 6′ 5″
4 6 4 St. ω in hor.
8 58 ♃ in h. boreal. ſtellâ 6′ 11″
4 10 27 St. ω in hor.
13 21 ♃ in h. boreal. ſtellâ 6′ 5″
4 14 56 St. ω in hor.
17 50 ♃ in h. boreal. ſtellâ 6′ 11″.

Sept. 7 mane cœpi comparare ♃^{vem} cum ſtella ι, quæ in Zod. ſtell. Flamſt. ponitur in cincinnis frontis Tauri inter duo ejuſdem cornua.

1^h 17′ 10″ ♃ in hor.
28 38 St. in h. auſtralior ♃ 1′ 22″
1 32 15 ♃ in hor.
43 43 St. in h. auſtralior ♃ 1′ 22″
1 59 24 ♃ in hor.
2 10 52 St. in h. auſtralior ♃ 1′ 23″.

Sept. 9 mane
2^h 0′ 40″ ♃ in hor.
11 31 St. in h. auſtralior ♃ 2′ 39″
2 13 39 ♃ in hor.
24 29 St. in h. auſtralior ♃ 2′ 39″
2 27 31 ♃ in hor.
38 20 St. in h. auſtralior ♃ 2′ 39″.

Sept. 16 mane
1^h 28′ 25″ ♃ in hor.
37 30 St. in h. auſtralior ♃
5′ 40″
1 55 27 ♃ in hor.
2 4 31 St. in h. auſtralior ♃
5′ 40″
2 6 55 ♃ in hor.
16 0 St. in h. auſtralior ♃
5′ 40″
2 32 7 ♃ in hor.
41 11 St. in h. auſtralior ♃
5′ 40″.

Sept. 18 mane
1^h 36′ 17″ ♃ in hor.
44 59 St. in h. auſtralior ♃
6′ 18″
1 48 4 ♃ in hor.
56 47 St. in h. auſtralior ♃
6′ 14″
2 16 46 ♃ in hor.
25 27 St. in h. auſtralior ♃
6′ 7″.

Sept. 24 mane poſt med. noct.
0^h 12′ 41″ ♃ in hor.
20 34 St. in h. auſtralior ♃
7′ 26″
0^h 24′ 44″ ♃ in hor.
32 37½ St. in h. auſtralior ♃
7′ 26″
0 37 26 ♃ in hor.
45 19 St. in h. auſtralior ♃
7′ 30″.

Sept. 28 veſp. ante med. noct.
11^h 0′ 42″ ♃ in hor.
8 17 St. in h. auſtral. ♃
7′ 42″
11 12 30 ♃ in hor.
20 5 St. in h. auſtral. ♃
7′ 42″
11 34 39 ♃ in hor.
42 13 St. in h. auſtral. ♃
7′ 49″.

Sept. 30 mane poſt med. noct.
0^h 48′ 3″ ♃ in hor.
55 37 St. in h. auſtralior ♃
7′ 37″
0 57 47 ♃ in hor.
1 5 21 St. in h. auſtralior ♃
7′ 40″
1 7 53 ♃ in hor.
15 26 St. in h. auſtralior ♃
7 51″

Rr 3

1^h 20′ 1″ ♃ in hor.
27 34 St. in h. auſtralior ♃ 7′ 50″.

Oct. 1 mane poſt med. noct.
0^h 54′.46″ ♃ in hor.
1 2 19 St. in h. auſtral. ♃ 7′ 36″
1 5 45 ♃ in hor.
13 18 St. in h. auſtral. ♃ 7′ 42″
1 16 17 ♃ in hor.
23 49 St. in h. auſtral. ♃ 7′ 42″.

Oct. 3 veſpere
10^h 32′ 29″ ♃ in hor.
40 7 St. in h. auſtral. ♃ 7′ 25″
10 41 51 ♃ in hor.
49 29 St. in h. auſtral. ♃ 7′ 24″
10 50 38 ♃ in hor.
58 15 St. in h. auſtral. ♃ 7′ 23″.

Oct. 26 veſpere
9^h 18′ 10″ ♃ in hor.
30 31 St. in h. auſtralior ♃ vacat.

9^h 35′ 43″ ♃ in hor.
48 4 St. in h. jam bor. ♃ 2′ 31″
9 49 55 ♃ in hor.
10 2 16 St. in h. boreal. ♃ 2′ 31″.

Nov. 4 veſpere
9^h 2′ 19″ ♃ in hor.
18 19 St. in h. boreal. ♃ 10′ 2″
9 20 9 ♃ in hor.
36 7 St. in h. boreal. ♃ 10′ 5″
9 40 2 ♃ in hor.
56 1 St. in h. boreal. ♃ 10′ 0″
9 58 49 ♃ in hor.
10 14 48 St. in h. boreal. ♃ 10′ 0″.

Nov. 27 veſpere
7^h 19′ 10″ ♃ in hor.
47 21 St. in h. borealior ♃ 35′ 41″
7 57 21 ♃ in hor.
8 25 32 St. in h. borealior ♃ 35′ 43″.

Nov. 28 veſpere
$7^h\ 44'\ 45''$ ♃ in hor.
8 13 31 St. in h. borealior ♃ 36′ 57″
8 15 45 ♃ in hor.
44 31 St. in h. borealior ♃ 36′ 59″.

Nov. 29 veſpere
$6^h\ 42'\ 31''$ ♃ in hor.
7 11 52 St. in h. borealior ♃ 38′ 13″
7 14 21 ♃ in hor.
43 40 St. in h. borealior ♃ 38′ 13″
7 47 7 ♃ in hor.
8 16 26 St. in h. borealior ♃ 38′ 25″.
Hodie mane ☍ ☉ ♃.

Dec. 17 veſpere cœpi comparare ♃vem cum ſtella, quæ in Zod. ſtell. Flamſt. notatur in ♉ ω 2.
$5^h\ 31'\ 34''$ St. ω in hor.
37 50 ♃ in h. boreal. ſtellâ 15′ 45″
5 39 33 St. ω in hor.
45 49 ♃ in h. boreal. ſtellâ 15′ 51″
5 47 26 St. ω in hor.
53 42 ♃ in h. boreal. ſtellâ 15′ 48″.

Dec. 31 veſpere
$5^h\ 21'\ 45''$ St. ω in hor.
59 ♃ in h. boreal. ſtellâ 2′ 23″
5 29 0 ♃ diſt. a ſtella 3′ 57″.

Anno 1752.

Jan. 4 veſpere
$5^h\ 31'\ 54''$ ♃ in hor.
33 0 St. in h. borealior ♃ 0′ 33″
$5^h\ 35'\ 52''$ ♃ in hor.
36 58 St. in h. auſtralior ♃ 0′ 33″.

Jan. 5 veſpere
5^h 9′ 23″ ♃ in hor.
10 46 St. in h. borealior ♃
1′ 4″
5 14 42 ♃ in hor.
16 5 St. in h. borealior ♃
1′ 4″.
5 17 39 ♃ in hor.
19 2 St. in h. borealior ♃
1′ 4″.

Jan. 10 veſpere
5^h 5′ 49″ ♃ in hor.
8 32 St. in h. borealior ♃
3′ 39″
5 10 40 ♃ in hor.
13 22 St. in h. borealior ♃
3′ 37″
5 15 15 ♃ in hor.
17 57½ St. in h. borealior ♃
3′ 41″.

Jan. 11 veſpere
5^h 11′ 2″ ♃ in hor.
13 57 St. in h. borealior ♃
3′ 56″
5 15 26 ♃ in hor.
18 22 St. in h. borealior ♃
4′ 6″
5^h 19′ 28″ ♃ in hor.
22 23½ St. in h. borealior ♃
4′ 6″.

Jan. 15 veſpere
5^h 6′ 4″ ♃ in hor.
9 45 St. in h. borealior ♃
5′ 20″
5 11 26½ ♃ in hor.
15 6½ St. in h. borealior ♃
5′ 10″
5 17 4 ♃ in hor.
20 44 St. in h. borealior ♃
5′ 10″.

Jan. 16 veſpere
5^h 9′ 5″ ♃ in hor.
12 55 St. in h. borealior ♃
5′ 19″
5 21 41 ♃ in hor.
25 31 St. in h. borealior ♃
5′ 19″
5 29 34 ♃ in hor.
33 24 St. in h. borealior ♃
5′ 25″.

Jan. 17 veſpere

5^h 14′ 56″ ♃ in hor.
18 54 St. in h. borealior ♃ 5′ 28″
5 20 58 ♃ in hor.
24 56 St. in h. borealior ♃ 5′ 38″
5 26 54 ♃ in hor.
30 52 St. in h. borealior ♃ 5′ 28″.

Jan. 18 veſpere

5^h 15′ 32″ ♃ in hor.
19 37 St. in h. borealior ♃ 5′ 42″
5 27 5 ♃ in hor.
31 10 St. in h. borealior ♃ 5′ 38″
5 33 10 ♃ in hor.
37 15 St. in h. borealior ♃ 5′ 49″.

Jan. 19 veſpere

5^h 7′ 27½″ ♃ in hor.
11 40 St. in h. borealior ♃ 5′ 42″
5^h 13′ 32½″ ♃ in hor.
17 44½ St. in h. borealior ♃ 5′ 42″
5 19 38 ♃ in hor.
23 49½ St. in h. borealior ♃ 5′ 42″.

Jan. 20 veſpere

5^h 9′ 5″ ♃ in hor.
13 22 St. in h. borealior ♃ 5′ 40″
5 15 23 ♃ in hor.
19 40½ St. in h. borealior ♃ 5′ 44″
5 22 17 ♃ in hor.
26 35 St. in h. borealior ♃ 5′ 46″.

Jan. 21 veſpere

5^h 6′ 19″ ♃ in hor.
10 41 St. in h. borealior ♃ 5′ 44″
5 12 12 ♃ in hor.
16 34 St. in h. borealior ♃ 5′ 44″
5 18 21 ♃ in hor.
22 43 St. in h. borealior ♃ 5′ 44″.

Jan. 23 veſpere
5^h 6′ 40″ ♃ in hor.
11 10 St. in h. borealior ♃
5′ 38″
5 12 52 ♃ in hor.
17 22 St. in h. borealior ♃
5′ 38″
5 18 31 ♃ in hor.
23 1 St. in h. borealior ♃
5′ 42″.

Jan. 24 veſpere
5^h 15′ 4″ ♃ in hor.
19 37 St. in h. borealior ♃
5′ 35″
5 26 1 ♃ in hor.
30 33 St. in h. borealior ♃
5′ 27″
5 41 16 ♃ in hor.
45 48 St. in h. borealior ♃
5′ 26″.

Jan. 25 veſpere
5^h 9′ 1″ ♃ in hor.
13 35 St. in h. borealior ♃
5′ 14″
5 15 23 ♃ in hor.
19 57 St. in h. borealior ♃
5′ 15″
5^h 22′ 9″ ♃ in hor.
26 43 St. in h. borealior ♃
5′ 15″.

Jan. 26 veſpere
5^h 9′ 9″ ♃ in hor.
13 43 St. in h. borealior ♃
5′ 4″
5 15 19 ♃ in hor.
19 53 St. in h. borealior ♃
5′ 18″
5 21 38½ ♃ in hor.
26 12½ St. in h. borealior ♃
5′ 9″
5 28 8½ ♃ in hor.
32 43 St. in h. borealior ♃
5′ 3″.

Jan. 27 veſpere
5^h 13′ 51″ ♃ in hor.
18 25 St. in h. borealior ♃
4′ 50″
5 19 56 ♃ in hor.
34 30½ St. in h. borealior ♃
4′ 42″
5 25 53 ♃ in hor.
30 26 St. in h. borealior ♃
4′ 50″.

Jan. 29 veſpere
5ʰ 10′ 11″ ♃ in hor.
14 42 St. in h. borealior ♃ 3′ 55″
5 16 27 ♃ in hor.
20 58 St. in h. borealior ♃ 4′ 4″
5 30 20 ♃ in hor.
34 51 St. in h. borealior ♃ 4′ 4″.

Jan. 30 veſpere
11ʰ 10′ 26″ ♃ in hor.
14 53 St. in h. boreal. ♃ 3′ 48″
11 16 43 ♃ in hor.
21 10 St. in h. boreal. ♃ 3′ 40″
11 22 48 ♃ in hor.
27 15 St. in h. boreal. ♃ 3′ 40″.

Febr. 1 veſpere
5ʰ 19′ 58″ ♃ in hor.
24 18 St. in h. borealior ♃ 2′ 52″
5ʰ 25′ 52″ ♃ in hor.
36 12 St. in h. borealior ♃ 3′ 2″
5 31 54 ♃ in hor.
36 14 St. in h. borealior ♃ vacat.

Febr. 2 veſpere
5 18 39 ♃ in hor.
22 53½ St. in h. borealior ♃ 2′ 15″
5 24 45 ♃ in hor.
29 0 St. in h. borealior ♃ 2′ 24″
5 31 46 ♃ in hor.
36 1 St. in h. borealior ♃ 2′ 20″.

Febr. 21 veſpere
10ʰ 20′ 57″ St. ω 2 in hor.
28 3 ♃ in h. bor. ſtellâ 14′ 41″.

April. 6 veſp. ♃ denuo cum ι ♉.
8ʰ 3′ 59″ ♃ in hor.
23 12 St. in h. auſtralior ♃
12′ 33″
8 27 6½ ♃ in hor.
46 19 St. in h. auſtralior ♃
12′ 15″.

April. 13 veſpere
7ʰ 50′ 26″ ♃ in hor.
8 4 5 St. in h. auſtralior ♃
25′ 6″
8 13 3 ♃ in hor.
26 41 St. in h. auſtralior ♃
25′ 6″.

Sept. 15 mane cœpi comparare ♃ᵛᵉᵐ cum ſtella δ ♊, quæ in Zod. ſtell. Famſt. ponitur in umbilico Pollucis.

3ʰ 45′ 53″ ♃ in hor.
58 6 St. in h. auſtralior ♃
21′ 44″
4 0 49 ♃ in hor.
13 1 St. in h. auſtralior ♃
21′ 52″
4 16 8 ♃ in hor.
28 20 St. in h. auſtralior ♃
21′ 46″.

3ʰ 13′ 13″ ♃ in hor.
24 52 St. in h. auſtralior ♃.
21′ 13″.

Sept. 16 mane
2ʰ 57′ 43″ ♃ in hor.
3 9 22 St. in h. auſtralior ♃
21′ 19″

Oct. 3 mane
2ʰ 22′ 27″ ♃ in hor.
25 40 St. in h. auſtralior ♃
11′ 3″
2 35 9 ♃ in hor.
38 22 St. in h. auſtralior ♃
10′ 57″
2 41 39 ♃ in hor.
44 52 St. in h. auſtralior ♃
11′ 1″.

§. III.

MARS CUM FIXIS.

Anno 1746.

Sept. 29 mane comparare cœpi ♂tem cum Regulo α ♌.
5h 0′ 0″ Erat ♂ orientalior ſtellâ 1′ 27″ penduli, eâdemque borealior 45′ 17″, diſtabat item ♂ a ſtella 49′ 32″.

Sept. 30 mane
5h 26′ 0″ ♂ orientalior ſtellâ 3′ 55″, eâque borealior 32′ 48″.

Oct. 1 mane
4h 50′ 0″ ♂ orientalior ſtellâ 6′ 14″, eâque borealior 20′ 42″.

Oct. 2 mane
5h 16′ 9″ ♂ orientalior ſtellâ 8′ 39″, eâque borealior 7′ 56″.

Oct. 6 mane
5h 53′ 41″ ♂ orientalior ſtellâ 18′ 9″, eâque auſtralior 42′ 38″.

Oct. 7 mane
5h 58′ 41″ ♂ orientalior ſtellâ 20′ 36″, eâque auſtralior 55′ 28″.

Oct. 11 mane cœpi comparare ♂tem cum ſtella ρ ♌.
5^h 59′ 0″ ♂ orientalior ſtellâ 5′ 18″, eâque borealior 48′ 3″.

Oct. 12 mane
6^h 0′ 54″ ♂ orientalior ſtellâ 7′ 38″, eâque borealior 34′ 56″.

Oct. 13 mane
5^h 31′ 45″ ♂ orientalior ſtellâ 9′ 54″, eâque borealior 22′ 11″.

Oct. 14 mane
5^h 59′ 28″ ♂ orientalior ſtellâ 12′ 22″, eâque borealior 8′ 45″.

Oct. 17 mane dubie
6^h 15′ 13″ ♂ orientalior ſtellâ 19′ 12″, eâque auſtralior 30′ 43″.

Oct. 18 mane
5^h 37′ 29″ ♂ orientalior ſtellâ 21′ 29″, eâque auſtralior 43′ 11″.

Oct. 19 mane dubie
5^h 54′ 52″ ♂ orientalior ſtellâ 23′ 49″, eâque auſtralior 56′ 0″.

Oct. 20 mane comparare cœpi ♂tem cum ſtella χ ♌.
5^h 16′ 34″ ♂ occidentalior ſtellâ 6′ 26″, eâque borealior 44′ 0″.

Oct. 22 mane
5^h 0′ 0″ ♂ occidentalior ſtellâ 2′ 0″, eâque borealior 18′ 49″.

Oct. 23 mane
6^h 4′ 46″ ♂ orientalior ſtellâ 0′ 24″, eâque borealior 2′ 45″.

Oct. 24 mane
6^h 7′ 0″ ♂ orientalior ſtellâ 2′ 40″, eâque auſtralior 10′ 16″.

Oct. 25 mane
5^h 3′ 9″ ♂ orientalior ſtellâ 4′ 49″, eâque auſtralior 23′ 18″.

Oct. 27 mane comparare cœpi ♂^tem cum ſtella σ ♌.
4^h 41′ 26″ ♂ occidentalior ſtellâ 6′ 50″, eâque borealior 26′ 50″.

Oct. 28 mane
4^h 30′ 44″ ♂ occidentalior ſtellâ 4′ 38″, eâque borealior 13′ 28″.
Iterum diluculo
6^h 12′ 40″ ♂ occidentalior ſtellâ 4′ 30″, eâque borealior 12′ 40″.

Nov. 14 mane cœpi comparare ♂^tem cum ſtella β ♍.

4^h 46′ 0″ ♂ diſt. a ſt. 1° 0′ 15″	5^h 56′ 38″ St. in hor.
4 48 20 St. in hor.	59 56 ♂ in h. boreal. ſtellâ 34′ 48″.
51 37 ♂ in h. boreal. ſtellâ 34′ 36″	

Nov. 15 mane
4ʰ 26′ 18″ St. in hor.
31 45 ♂ in h. boreal. ſtellâ
21′ 1″
4 36 11 St. in hor.
41 38 ♂ in h. boreal. ſtellâ
20′ 59″
4 47 18 St. in hor.
52 45 ♂ in h. boreal. ſtellâ
20′ 59″.

Nov. 16 mane
5ʰ 4′ 59″ St. in hor.
12 37 ♂ in h. boreal. ſtellâ
6′ 28″

Nov. 17 mane
4ʰ 8′ 26″ St. in hor.
18 8 ♂ in h. auſtral. ſtellâ
6′ 8″
4 28 6 St. in h.
37 49 ♂ in h. auſtral. ſtellâ
6′ 8″.

Nov. 19 mane
4ʰ 1′ 2″ St. in hor.
15 3 ♂ in h. auſtral. ſtellâ
33′ 19″
4ʰ 52′ 59″ St. in hor.
5 7 1 ♂ in h. auſtral. ſtellâ
33′ 45″.

Nov. 20 mane
3ʰ 26′ 58″ St. in hor.
43 1 ♂ in h. auſtral. ſtellâ
46′ 25″
4 15 26 St. in hor.
31 34 ♂ in h. auſtral. ſtellâ
46′ 54″.

Nov. 25 mane cœpi comparare
♂tem cum ♍.
3ʰ 45′ 43″ ♂ in hor.
48 29 St. in h. auſtralior ♂
33′ 18″
4 2 37 ♂ in hor.
5 21 St. in h. auſtralior ♂
33′ 15″
4 8 13 ♂ in hor.
10 57 St. in h. auſtralior ♂
33′ 11″
4 27 54 ♂ in hor.
30 37 St. in h. auſtralior ♂
33′ 7″
4 37 0 ♂ diſt. a ſtella
52′ 37″.
Nov. 26

Nov. 26 mane
3h 52′ 41″ ♂ in hor.
53 22 St. in h. auſtralior ♂ 19′ 46″
4 5 22 ♂ in hor.
6 3 St. in h. auſtralior ♂ 19′ 46″
4 13 18 ♂ diſt. a St. 21′ 37″. Et ab alia ſtellula vicina 28′ 49″.

Nov. 28 mane
3h 45′ 15″ St. ♍ in hor.
48 48 ♂ in h. auſtral. ſtellâ 6′ 57″
3 53 57 St. ♍ in hor.
57 31 ♂ in h. auſtral. ſtellâ 7′ 8″
4 0 47 St. ♍ in hor.
4 21 ♂ in h. auſtral. ſtellâ 7′ 21″
4 14 40 ♂ diſt. a ſtella ♍ 54′ 31″.

Nov. 29 mane
3h 31′ 59″ St. ♍ in hor.
37 36 ♂ in h. auſtral. ſtellâ 20′ 22″
3h 43′ 9″ St. ♍ in hor.
48 46 ♂ in h. auſtral. ſtellâ 20′ 12″
4 2 16 St. ♍ in hor.
7 54 ♂ in h. auſtral. ſtellâ 20′ 12″.
Eodem

Nov. 29 mane cœpi comparare ♂tem cum γ ♍.
4h 36′ 7″ ♂ in hor.
52 15 St. in h. auſtralior ♂ 27′ 8″
4 56 32 ♂ in hor.
5 12 39 St. in h. auſtralior ♂ 26′ 54″.

Dec. 1 mane
4h 59′ 38″ ♂ in hor.
5 11 29 St. in h. auſtralior ♂ 0′ 0″.
Dubie.
5 17 20 ♂ in hor.
29 16 St. in h. auſtralior ♂ 0′ 19″.
Tutius.

Dec. 2 mane
4ʰ 10′ 27″ ♂ in hor.
20 23 St. in h. borealior ♂ 11′ 54″
4 26 50 ♂ in hor.
36 44 St. in h. borealior ♂ 12′ 10″
4 48 37 ♂ in hor.
58 28 St. in h. borealior ♂ 12′ 18″.

Dec. 16 mane cœpi comparare ♂ᵗᵉᵐ cum ſtella θ ♍ arcte conjungendum.
4ʰ 12′ 26″ ♂ in hor.
21 35 St. in h. auſtralior ♂ 55′ 39″
5 1 40 ♂ in hor.
10 47 St. in h. auſtralior ♂ 54′ 59″
6 19 9 ♂ in hor.
28 12 St. in h. auſtralior ♂ 54′ 34″
6 33 34 ♂ in hor.
42 36 St. in h. auſtralior ♂ 54′ 21″.

Dec. 17 mane
3ʰ 25′ 44″ ♂ in hor.
33 4 St. in h. auſtralior ♂ 43′ 16″
3 36 29 ♂ in hor.
43 44 St. in h. auſtralior ♂ 43′ 16″
3 46 59 ♂ in hor.
54 17 St. in h. auſtralior ♂ 42′ 55″
3 58 48 ♂ in hor.
4 6 2 St. in h. auſtralior ♂ 43′ 18″.

Dec. 18 mane
3ʰ 16′ 5″ ♂ in hor.
21 24 St. in h. auſtralior ♂ 30′ 49″
3 24 28 ♂ in hor.
29 47 St. in h. auſtralior ♂ 30′ 43″.

Dec. 19 mane
3ʰ 18′ 27″ ♂ in hor.
21 43 St. in h. auſtralior ♂ 18′ 26″
3 33 23 ♂ in hor.
36 39 St. in h. auſtralior ♂ 18′ 26″.

3^h 41' 46" ♂ in hor.
45 2 St. in h. auſtralior ♂
18' 26"
3 52 48 ♂ diſt. a ſtella
52' 15".

Dec. 20 mane
3^h 3' 34" ♂ in hor.
4 55 St. in h. auſtralior ♂
5' 15"
3 12 12 ♂ in hor.
13 32 St. in h. auſtralior ♂
5' 15"
3 18 1 ♂ in hor.
19 21 St. in h. auſtralior ♂
5' 15"
3 26 30 ♂ diſt. a ſtella
20' 36".

Dec. 21 mane
3^h 4' 30" St. in hor.
5 11 ♂ in h. auſtral. ſtellâ
5' 51".

Obſervatio tuta. Nam iterum, ac tertio repetita idem dedit.

3^h 14' 0" ♂ diſt. a ſtella
11' 33".

Dec. 22 mane
2^h 52' 15" St. in hor.
54 53 ♂ in h. auſtral. ſtellâ
17' 26"
2 59 6 St. in hor.
3 1 45 ♂ in h. auſtral. ſtellâ
17' 36"
3 13 10 St. in hor.
15 49 ♂ in h. auſtral. ſtellâ
17' 49"
3 30 26 ♂ diſt. a ſtellâ
43' 44".

Dec. 23 mane
4^h 5' 13" St. in hor.
9 53 ♂ in h. auſtral. ſtellâ
30' 41"
4 14 22 St. in hor.
19 2 ♂ in h. auſtral. ſtellâ
30' 50".

Dec. 24 mane
2^h 53' 43" St. in hor.
3 0 16 ♂ in h. auſtral. ſtellâ
41' 54"
3 3 25 St. in hor.
9 59 ♂ in h. auſtral. ſtellâ
41' 58".

2ʰ 52′ 45″ St. in hor.
56 46 ♂ in h. auſtral. ſtellà
vacat.
3 1 8 St. in hor.
5 11 ♂ in h. auſtral. ſtellà
18′ 5″
3 18 38 St. in hor.
22 42 ♂ in h. auſtral. ſtellà
18′ 7″
3 34 26 St. in hor.
38 30 ♂ in h. auſtral. ſtellà
18′ 32″.

Jan. 9 mane
2ʰ 34′ 43″ St. in hor.
40 33 ♂ in h. auſtral. ſtellà
29′ 1″
3 3 46 St. in hor.
9 38 ♂ in h. auſtral. ſtellà
29′ 3″.

Jan. 10 mane
3ʰ 3′ 1″ St. in hor.
10 49 ♂ in h. auſtral. ſtellà
39′ 38″
3 30 7 St. in hor.
37 54 ♂ in h. auſtral. ſtellà
39′ 42″.

Jan. 11 mane
2ʰ 31′ 45″ St. in hor.
41 18 ♂ in h. auſtral. ſtellà
49′ 42″
2 51 21 St. in hor.
3 0 57 ♂ in h. auſtral. ſtellà
50′ 8″
3 8 48 St. in hor.
18 25 ♂ in h. auſtral. ſtellà
50′ 8″
3 28 0 St. in hor.
37 40 ♂ in h. auſtral. ſtellà
50′ 18″.

Febr. 6 mane comparare cœpi
♂ᵗᵉᵐ cum ſtella μ ♎
in Lance auſtrali.
2ʰ 35′ 7″ ♂ in hor.
48 0 St. in h. auſtralior ♂
52′ 51″
2 53 28 ♂ in hor.
3 6 20 St. in h. auſtralior ♂
52′ 55″.

Febr. 8 mane
2ʰ 15′ 49″ ♂ in hor.
25 39 St. in h. auſtralior ♂
38′ 5″.

2ʰ 31′ 10″ ♂ in hor.
41 0 St. in h. auſtralior ♂
37′ 53″
2 42 56 ♂ in hor.
52 46 St. in h. auſtralior ♂
37′ 53″.

Febr. 10 mane
2ʰ 9′ 54″ ♂ in hor.
16 47 St. in h. auſtralior ♂
23′ 27″
2 24 58 ♂ in hor.
31 51 St. in h. auſtralior ♂
23′ 23″
2 38 10 ♂ in hor.
45 2 St. in h. auſtralior ♂
23′ 18″.

Febr. 11 mane
5ʰ 4′ 53″ ♂ in hor.
10 9 St. in h. auſtralior ♂
15′ 34″
5 18 25 ♂ in hor.
23 39 St. in h. auſtralior ♂
15′ 32″
5 33 47 ♂ in hor.
39 1 St. in h. auſtralior ♂
15′ 32″.

Febr. 13 mane
1ʰ 42′ 29″ ♂ in hor.
45 4 St. in h. auſtralior ♂
2′ 37″
1 46 44 ♂ in hor.
49 19 St. in h. auſtralior ♂
2′ 41″
1 55 18 ♂ in hor.
57 53 St. in h. auſtralior ♂
2′ 37″
3 59 2 ♂ in hor.
4 1 30 St. in h. auſtralior ♂
1′ 56″
4 7 1 ♂ diſt. a ſtella
36′ 4″.

Febr. 15 mane, & primum
5ʰ 37′ 0″ ♂ diſt. a ſtella
12′ 55″
5 38 52 ♂ in hor.
39 16 St. in h. jam bor. ♂
20′ 44″
5 40 28 ♂ in hor.
52 St. in h. borealior ♂
20′ 44″
5 41 53 ♂ in hor.
17½ St. in h. borealior ♂
20′ 44″.

Mart. 7 mane cœpi comparare ♂tem cum ſtella α ♎ lucida Lancis auſtr.

2h 23′ 47″ St. in hor.
44 58 ♂ in h. auſtral. ſtellâ 0′ 44″
2 52 12 St. in hor.
3 13 24 ♂ in h. auſtral. ſtellâ 0′ 44″
3 19 16 St. in hor.
40 29 ♂ in h. auſtral. ſtellâ vacat.
3 47 50 St. in hor.
4 9 4 ♂ in h. auſtral. ſtellâ 0′ 57″
4 16 9 St. in hor.
37 24 ♂ in h. auſtral. ſtellâ 1′ 13″.

Mart. 8 mane

2h 39′ 36″ St. in hor.
3 1 35 ♂ in h. auſtral. ſtellâ 4′ 39″
3 6 41 St. in hor.
28 41 ♂ in h. auſtral. ſtellâ 4′ 49″
3 37 0 St. in hor.
59 1 ♂ in h. auſtral. ſtellâ 4′ 48″
4h 2′ 59″ St. in hor.
25 2 ♂ in h. auſtral. ſtellâ 4′ 54″.

Mart. 9 mane

3h 9′ 58½″ St. in hor.
32 44½ ♂ in h. auſtral. ſtellâ 8′ 17″
3 37 11 St. in hor.
59 59 ♂ in h. auſtral. ſtellâ 8′ 27″
4 8 10 St. in hor.
30 58 ♂ in h. auſtral. ſtellâ 8′ 44″.

Mart. 16 mane cœpi comparare ♂tem cum ſtella ζ, quæ in Zod. ſtell. Flamſt. ponitur inter ♎ & ♏.

3h 42′ 41″ ♂ in hor.
57 15 St. in h. auſtralior ♂ 30′ 11″
4 24 3 ♂ in hor.
38 37 St. in h. auſtralior ♂ 30′ 11″.

4h

$4^h\ 44'\ 4''$ ♂ in hor.
58 36 St. in h. auſtralior ♂ 30′ 9″
5 4 18 ♂ in hor.
18 50 St. in h. auſtralior ♂ 30′ 0″.

Mart. 18 mane
$1^h\ 16'\ 51''$ ♂ in hor.
30 33 St. in h. auſtralior ♂ 25′ 37″
1 40 50 ♂ in hor.
54 33 St. in h. auſtralior ♂ 25′ 37″
2 2 14 ♂ in hor.
15 58 St. in h. auſtralior ♂ 25′ 33″
2 27 11 ♂ in hor.
40 54 St. in h. auſtralior ♂ vacat.

Mart. 19 mane
$3^h\ 56'\ 0''$ ♂ in hor.
4 9 20 St. in h. auſtralior ♂ 23′ 19″
4 31 27 ♂ in hor.
44 47 St. in h. auſtralior ♂ 23′ 20″

$4^h\ 49'\ 23''$ ♂ in hor.
5 2 43 St. in h. auſtralior ♂ 23′ 11″
5 8 32 ♂ in hor.
21 52 St. in h. auſtralior ♂ 23′ 16″.

Mart. 21 mane poſt denſas nives, dilapſis nubibus obiter
$5^h\ 4'\ 20''$ ♂ in hor.
17 3 St. in h. auſtralior ♂ 19′ 16″
5 20 44 ♂ in hor.
33 29 St. in h. auſtralior ♂ 19′ 29″.

Mart. 22 mane
$2^h\ 40'\ 7''$ ♂ in hor.
52 38 St. in h. auſtralior ♂ 17′ 59″
3 0 25 ♂ in hor.
12 56 St. in h. auſtralior ♂ 18′ 2″
3 21 2 ♂ in hor.
33 33 St. in h. auſtralior ♂ 17′ 59″.

Mart. 23 mane
4h 55′ 12″ ♂ in hor.
5 7 30 St. in h. auſtralior ♂
15′ 59″
5 11 19 ♂ in hor.
23 38 St. in h. auſtralior ♂
16′ 5″.

Mart. 24 mane
2h 18′ 58″ ♂ in hor.
31 10 St. in h. auſtralior ♂
15′ 5″
2 35 10 ♂ in hor.
47 22 St. in h. auſtralior ♂
15′ 6″
2 54 38 ♂ in hor.
3 6 50 St. in h. auſtralior ♂
15′ 6″.

Mart. 25 & 26 nubes.

Mart. 27 mane
3h 12′ 34″ ♂ in hor.
24 38 St. in h. auſtralior ♂
11′ 48″
3 32 58 ♂ in hor.
45 2 St. in h. auſtralior ♂
11′ 50″

3h 49′ 18″ ♂ in hor.
4 1 22 St. in h. auſtralior ♂
11′ 50″.

Mart. 28 nubila.

Mart. 29 mane
1h 5′ 35″ ♂ in hor.
17 47 St. in h. auſtralior ♂
10′ 32″
1 22 56 ♂ in hor.
35 8 St. in h. auſtralior ♂
10′ 32″
1 39 5 ♂ in hor.
51 18 St. in h. auſtralior ♂
10′ 34″
1 58 4 ♂ in hor.
2 10 16 St. in h. auſtralior ♂
10′ 34″
2 16 1 ♂ in hor.
28 13 St. in h. auſtralior ♂
10′ 30″.

Mart. 30 mane
4h 32′ 4″ ♂ in hor.
44 28 St. in h. auſtralior ♂
9′ 58″.

4^h 39′ 39″ ♂ in hor.
5 2 3 St. in h. auſtralior ♂ 9′ 57″
5 6 32 ♂ in hor.
18 56 St. in h. auſtralior ♂ 9′ 58″.

Mart. 31 nubila.

April. 1 mane
2^h 36′ 3″ ♂ in hor.
48 52 St. in h. auſtralior ♂ 9′ 54″
2 53 40 ♂ in hor.
3 6 29 St. in h. auſtralior ♂ 9′ 54″
3 12 30 ♂ in hor.
25 19 St. in h. auſtralior ♂ 9′ 54″
3 30 50 ♂ in hor.
43 41 St. in h. auſtralior ♂ 9′ 54″
3 49 9 ♂ in hor.
4 2 1 St. in h. auſtralior ♂ 9′ 54″.

April. 4 mane
3^h 13′ 55″ ♂ in hor.
27 51 St. in h. auſtralior ♂ 10′ 23″
3 32 1 ♂ in hor.
45 57 St. in h. auſtralior ♂ 10′ 23″
3 50 22 ♂ in hor.
4 4 18 St. in h. auſtralior ♂ 10′ 23″.

April. 5 mane
3^h 2′ 39″ ♂ in hor.
17 2 St. in h. auſtralior ♂ 11′ 10″
3 21 45 ♂ in hor.
36 8 St. in h. auſtralior ♂ 11′ 10″
3 40 1 ♂ in hor.
54 25 St. in h. auſtralior ♂ 11′ 3″.

April. 16 veſp. comparare cœpi ♂tem Achronycum cum ſtella α ♎, & una cum ſequentibus ad ortum 2 ſtellis ν majore una, altera minore.

9^h 24′ 8″ St. α ♎ in hor.
39 44 St. ν maj. in hor.
42 6 ♂ in h. auſtr. ſtellâ α 29′ 2″
9 48 2 ♂ diſt. a ſtel. ν maj. 35′ 53″
9 52 26 ♂ diſt. a ſtel. ν min. 31′ 23″
10 5 48 St. ν maj. in hor.
8 9 ♂ in h. auſtr. ſtellâ 11′ 55″.

April. 17 veſpere
9^h 10′ 54″ St. α in hor.
27 55 ♂ in h. auſtral. ſtellâ 26′ 23″
9 33 18 ♂ diſt. a ν majore 20′ 24″
39 40 ♂ diſt. a ν minore 16′ 13″
9 51 41 St. ν maj. in hor.
52 58 ♂ in h. auſtral. ſtellâ 9′ 15″.

April. 18 mane
4^h 30′ 28″ ♂ diſt. a ν majore 16′ 3″
37 0 ♂ diſt. a ν minore 11′ 1″

4^h 47′ 21″ St. ν maj. in hor.
48 17 ♂ in h. auſtral. ſtellâ 8′ 36″
4 52 0 St. ν maj. in hor.
57 ♂ in h. auſtral. ſtellâ 8′ 28″.

April. 20 mane
4^h 27′ 12″ St. α in hor.
41 25 ♂ in h. auſtral. ſtellâ 19′ 46″.
Et poſt dies nubilos:

April. 27 mane
4^h 17′ 53″ St. α in hor.
22 53 ♂ in h. boreal. ſtellâ 4′ 46″
4 43 33 St. α in hor.
48 32 ♂ in h. boreal. ſtellâ 4′ 47″.

Eodem 27 veſpere
8^h 23′ 15″ St. α in hor.
27 19 ♂ in h. boreal. ſtellâ 7′ 12″
8 32 43 St. α in hor.
36 45 ♂ in h. boreal. ſtellâ 7′ 23″.

8^h 41′ 47″ St. α in hor.
45 50 ♂ in h. bor. ſtellà
7′ 28″
8 50 43 St. α in hor.
54 45 ♂ in h. bor. ſtellà
7′ 28″
8 59 44 St. α in hor.
9 3 45 ♂ in h. bor. ſtellà
7′ 30″
9. 10 15 St. α in hor.
14 16 ♂ in h. bor. ſtellà
7′ 30″
9 20 24 St. α in hor.
24 24 ♂ in h. bor. ſtellà
7′ 36″
9 34 38 St. α in hor.
38 36 ♂ in h. bor. ſtellà
7′ 44″
9 42 28 St. α in hor.
46 27 ♂ in h. bor. ſtellà
7′ 46″
9 53 34 St. α in hor.
57 31 ♂ in h. bor. ſtellà
7′ 49″
10 2 36 St. α in hor.
5 33 ♂ in h. bor. ſtellà
vacat.
10 21 45 St. α in hor.
25 41 ♂ in h. bor. ſtellà
8′ 55″

10^h 33′ 45″ St. α in hor.
37 40 ♂ in h. bor. ſtellà
7′ 57″
10 45 53 St. α in hor.
49 48 ♂ in h. bor. ſtellà
7′ 59″
11 6 14 St. α in hor.
10 6 ♂ in h. bor. ſtellà
7′ 56″
11 42 44 St. α in hor.
46 35 ♂ in h. bor. ſtellà
7′ 55″
11 50 45 St. α in hor.
54 36 ♂ in h. bor. ſtellà
8′ 5″
12 0 44 St. α in hor.
4 36 ♂ in h. bor. ſtellà
8′ 0″
12 8 50 ♂ diſt. a ſtella α
56′ 12″.

April. 30 mane
3^h 34′ 45″ St. α in hor.
35 28 ♂ in h. boreal. ſtellà
16′ 53″
3 50 19 St. α in hor.
51 1 ♂ in h. boreal. ſtellà
16′ 59″.

Eodem 30 veſpere

9^h	2′	12″	♂ in hor.
		33	St. α in h. auſtral. ♂ 20′ 1″
9	9	5	♂ in hor.
		26	St. in h. auſtralior ♂ 20′ 1″
9	17	52	♂ in hor.
	18	14	St. in h. auſtralior ♂ 20′ 5″.
9	23	35	♂ in hor.
		58	St. in h. auſtralior ♂ 20′ 7″
9	29	43	♂ in hor.
	30	6	St. in h. auſtralior ♂ 20′ 7″.

Maji 1 mane

3^h	55′	0″	♂ in hor.
		49	St. in h. auſtralior ♂ 21′ 19″ tuto.

Maji 3 veſpere

8^h	28′	44″	♂ in hor.
		28	St. in h. auſtralior ♂ 33′ 5″ d.
8	38	49	♂ in hor.
	43	33	St. in h. auſtralior ♂ 32′ 48″
8^h	46′	36″	♂ in hor.
	51	22	St. in h. auſtralior ♂ 32′ 58″.

Maji 6 veſpere

7^h	43′	45″	♂ in hor.
	52	55	St. in h. auſtralior ♂ 45′ 46″
7	56	40	♂ in hor.
8	5	50	St. in h. auſtralior ♂ 46′ 0″
8	9	18	♂ in hor.
	18	28	St. in h. auſtralior ♂ 46′ 8″
8	47	48	♂ in hor.
	57	2	St. in h. auſtralior ♂ 46′ 0″
9	0	57	♂ in hor.
	10	11	St. in h. auſtralior ♂ 46′ 3″.

Maji 7 veſpere

7^h	26′	36″	♂ in hor.
	37	15	St. in h. auſtralior ♂ 50′ 7″
7	41	49	♂ in hor.
	52	28	St. in h. auſtralior ♂ 50′ 14″
7	56	39	♂ in hor.
8	7	19	St. in h. auſtralior ♂ 50′ 19″.

8^h 10′ 33″ ♂ in hor.
21 14 St. in h. auſtralior ♂ 50′ 22″
8 25 20 ♂ in hor.
36 1 St. in h. auſtralior ♂ 50′ 22″.

Maji 8 veſpere
7^h 53′ 41″ ♂ in hor.
8 5 48 St. in h. auſtralior ♂ 54′ 40″
8 25 5 ♂ in hor.
37 16 St. in h. auſtralior ♂ 54′ 46″
8 41 53 ♂ in hor.
54 6 St. in h. auſtralior ♂ 54′ 50″.

Maji 12 veſpere cœpi comparare ♂^tem cum ſtella μ ♎ in Lance auſtrali.
7^h 26′ 56″ ♂ in hor.
43 21 St. in h. borealior ♂ 41′ 46″
7 54 18 ♂ in hor.
8 10 45 St. in h. borealior ♂ 41′ 46″

8^h 17′ 31″ ♂ in hor.
34 1 St. in h. borealior ♂ 41′ 46″.

Maji 13 veſpere
7^h 42′ 43″ ♂ in hor.
8 0 32 St. in h. borealior ♂ 37′ 47″
8 26 24 ♂ in hor.
44 16 St. in h. borealior ♂ 37′ 32″
8 49 11 ♂ in hor.
9 7 3 St. in h. borealior ♂ 37′ 27″
9 13 7 ♂ in hor.
31 1 St. in h. borealior ♂ 37′ 34″.

Maj. 16 veſpere
7^h 44′ 22″ ♂ in hor.
8 6 10 St. in h. borealior ♂ 26′ 8″
8 13 20 ♂ in hor.
35 9 St. in h. borealior ♂ 26′ 11″
8 43 5 ♂ in hor.
9 4 54 St. in h. borealior ♂ 26′ 17″.

$9^h\ 15'\ 52''$ ♂ in hor.

37 43 St. in h. borealior ♂ $26'\ 16''$

9 44 5 ♂ in hor.

10 5 58 St. in h. borealior ♂ $26'\ 6''$ d.

Maji 17 veſpere

$7^h\ 30'\ 40''$ ♂ in hor.

53 44 St. in h. borealior ♂ $22'\ 36''$

7 57 19 ♂ in hor.

8 20 23 St. in h. borealior ♂ $22'\ 42''$

8 25 3 ♂ in hor.

48 8 St. in h. borealior ♂ $22'\ 32''$.

Maji 23 veſp. cœpi comparare ♂tem cum ſtella λ ♍ ad parvum digitum pedis ſiniſtri Virginis.

$8^h\ 28'\ 52''$ St. in hor.

29 5 ♂ in h. auſtral. ſtellâ $44'\ 42''$

8 32 0 ♂ diſt. a ſtella $45'\ 5''$

Maji 26 veſpere

$8^h\ 15'\ 41''$ ♂ in hor.

18 12 St. in h. borealior ♂ $38'\ 29''$

8 22 50 ♂ in hor.

25 21 St. in h. borealior ♂ $38'\ 27''$.

Maji 31 veſpere

$8^h\ 20'\ 15''$ ♂ in hor.

26 21 St. in h. borealior ♂ $45'\ 0''$

8 30 13 ♂ in hor.

36 19 St. in h. borealior ♂ $44'\ 59''$

8 40 4 ♂ in hor.

46 12 St. in h. borealior ♂ $44'\ 59''$

8 49 47 ♂ in hor.

55 54 St. in h. borealior ♂ vacat.

9 0 28 ♂ in hor.

6 37 St. in h. borealior ♂ $45'\ 15''$.

Jun. 1 veſpere
8^h 9′ 42″ ♂ in hor.
16 20 St. in h. borealior ♂
44′ 40″
8 19 20 ♂ in hor.
25 59 St. in h. borealior ♂
44′ 40″
8 32 38 ♂ in hor.
39 20 St. in h. borealior ♂
44′ 36″
8 56 27 ♂ in hor.
9 3 9 St. in h. borealior ♂
44′ 33″
9 6 14 ♂ in hor.
12 57 St. in h. borealior ♂
44′ 23″.

Jun. 4 veſpere
7^h 47′ 59″ ♂ in hor.
55 59 St. in h. borealior ♂
44′ 10″
8 16 39 ♂ in hor.
24 41 St. in h. borealior ♂
44′ 10″
8 41 22 ♂ in hor.
49 26 St. in h. borealior ♂
44′ 10″.

Jun. 5 veſpere
8^h 10′ 35″ ♂ in hor.
18 56 St. in h. borealior ♂
44′ 42″
8 23 56 ♂ in hor.
32 17 St. in h. borealior ♂
44′ 39″.

Jun. 6 veſpere
7^h 41′ 36″ ♂ in hor.
50 15 St. in h. borealior ♂
45′ 25″
7 53 12 ♂ in hor.
8 1 52 St. in h. borealior ♂
45′ 20″
8 4 16 ♂ in hor.
12 56 St. in h. borealior ♂
45′ 23″.

Jun. 7 veſpere
7^h 59′ 20″ ♂ in hor.
8 8 14 St. in h. borealior ♂
46′ 10″
8 13 16 ♂ in hor.
22 10 St. in h. borealior ♂
46′ 10″.

8^h 27′ 49″ ♂ in hor.
36 42 St. in h. borealior ♂
46′ 15″.

Jun. 8 veſpere
8^h 24′ 26″ ♂ in hor.
33 30 St. in h. borealior ♂
47′ 22″
8 38 47 ♂ in hor.
47 52 St. in h. borealior ♂
47′ 25″
8 50 48 ♂ in hor.
59 53 St. in h. borealior ♂
47′ 20″.

Jun. 10 veſpere
8^h 7′ 21″ ♂ in hor.
16 39 St. in h. borealior ♂
50′ 23″
8 21 17 ♂ in hor.
30 35 St. in h. borealior ♂
50′ 27″
8 34 3 ♂ in hor.
43 21 St. in h. borealior ♂
50′ 32″.

Jun. 11 veſpere
8^h 6′ 53″ ♂ in hor.
16 10 St. in h. borealior ♂
52′ 14″.
Nec plus per nubes licuit.

Jun. 12 veſpere
7^h 50′ 10″ ♂ in hor.
59 27 St. in h. borealior ♂
54′ 19″.
Nubes.

Jun. 13 veſpere
8^h 2′ 39″ ♂ in hor.
11 50 St. in h. borealior ♂
56′ 49″
8 17 39 ♂ in hor.
26 50 St. in h. borealior ♂
56′ 46″
8 30 33 ♂ in hor.
39 44 St. in h. borealior ♂
56′ 46″.

Sept. 23 veſpere ♂ cum ſtella θ Serpentarii

7ʰ 37′ 50″ ♂ in hor.
39 16 St. in h. borealior ♂
12′ 51″
7 42 59 ♂ in hor.
44 24 St. in h. borealior ♂
12′ 46″
7 50 1 ♂ in hor.
51 25 St. in h. borealior ♂
12′ 55″
7 58 54 ♂ in hor.
8 0 18 St. in h. borealior ♂
12′ 50″
8 4 41 ♂ in hor.
6 3 St. in h. borealior ♂
12′ 56″
8 9 43 ♂ in hor.
11 5 St. in h. borealior ♂
12′ 54″.

Oct. 11 veſpere comparare cœpi ♂tem cum ſtella λ ♐ in arcu Sagittarii.
6ʰ 5′ 2″ ♂ in hor.
17 11 St. in h. auſtralior ♂
6′ 13″.

Oct. 12 veſpere
6ʰ 6′ 30″ ♂ in hor.
15 32 St. in h. auſtralior ♂
6′ 55″

6ʰ 19′ 34″ ♂ in hor.
38 33 St. in h. auſtralior ♂
7′ 8″.

Oct. 14 veſpere
6ʰ 1′ 23″ ♂ in hor.
4 5 St. in h. auſtralior ♂
8′ 50″
6 7 3 ♂ in hor.
9 44 St. in h. auſtralior ♂
8′ 53″
6 14 25 ♂ in hor.
17 6 St. in h. auſtralior ♂
8′ 52″.

Oct. 15 veſpere
6ʰ 9′ 28″ ♂ diſt. a ſtella
12′ 6″
6. 26 22 St. in hor.
54 ♂ in h. boreal. ſtellâ
10′ 9″.
Obtinuique eoſdem numeros iterum, ac tertio.

Oct. 16 veſpere
6ʰ 8′ 45″ St. in hor.
12 25 ♂ in h. boreal. ſtellâ
11′ 39″.

6^h 16′ 27″ St. in hor.
20 7 ♂ in h. boreal. ſtellâ 11′ 39″.

Oct. 17 veſpere
6^h 2′ 50″ St. in hor.
9 41 ♂ in h. boreal. ſtellâ 13′ 33″
6 12 43 St. in hor.
19 35 ♂ in h. boreal. ſtellâ 13′ 27″
6 23 4 St. in hor.
29 56 ♂ in h. boreal. ſtellâ 13′ 27″.

Oct. 27 veſpere cœpi comparare ♂tem cum ♓ ♐, nempe majuſcula, & auſtraliore trium ibi.
5^h 44′ 9″ ♂ in hor.
6 2 45 St. in h. auſtralior ♂ 11′ 43″
6 7 14 ♂ in hor.
25 47 St. in h. auſtralior ♂ 11′ 57″
6 33 35 ♂ in hor.
35 2 Alia ſtellula in hor. auſtr ♂ 14′ 52″.

Oct. 29 veſpere
5^h 49′ 29″ ♂ in hor.
6 1 38 St. in h. auſtralior ♂ 21′ 24″
6 6 57 ♂ in hor.
19 3 St. in h. auſtralior ♂ 21′ 32″
6 29 49 ♂ in hor.
41 52 St. in h. auſtralior ♂ 21′ 36″.

Oct. 30 veſpere
5^h 43′ 44″ ♂ in hor.
52 39 St. in h. auſtralior ♂ 26′ 24″
5 58 26 ♂ in hor.
6 7 21 St. in h. auſtralior ♂ 26′ 26″.

Oct. 31 veſpere
5^h 39′ 18″ ♂ in hor.
45 0 St. in h. auſtralior ♂ 31′ 42″
5 59 54 ♂ in hor.
6 5 34 St. in h. auſtralior ♂ 31′ 50″
6 10 23 ♂ in hor.
16 2 St. in h. auſtralior ♂ 31′ 52″.

6^h 20′ 34″ ♂ in hor.
26 12 St. in h. auſtralior ♂ 31′ 52″
6 31 34 ♂ in hor.
37 9 St. in h. auſtralior ♂ 31′ 58″
6 53 31 ♂ in hor.
59 4 St. in h. auſtralior ♂ 32′ 1″
8 8 26 ♂ in hor.
13 49 St. in h. auſtralior ♂ 32′ 5″.

Nov. 1 veſpere
5^h 48′ 32″ ♂ in hor.
51 0 St. in h. auſtralior ♂ 37′ 28″
5 53 30 ♂ in hor.
55 57 St. in h. auſtralior ♂ 37′ 28″
5 58 15 ♂ in hor.
6 0 42 St. in h. auſtralior ♂ 37′ 28″
6 6 30 ♂ in hor.
8 56 St. in h. auſtralior ♂ 37′ 30″
6 13 33 ♂ diſt. a χ minore, & auſtral. 37′ 30″
6 15 56 ♂ diſt. a χ majore, & boreal. 50′ 7″.

Porro hæ duæ ſtellæ ex repetitis operationibus differunt in aſcenſione recta 20″ penduli.

Nov. 17 veſpere ♂ cum ſtellula auſtraliore, & occidentaliore duarum, quæ in Zod. ſtell. Flamſt. ponuntur prope frontem Capricorni, & hæc quidem in ♑ 27° 25′. Cum latit. auſtr. 2° 5′.
5^h 38′ 15″ ♂ in hor.
42 33 St. in h. auſtralior ♂ 16′ 49″
5 48 36 ♂ in hor.
52 52 St. in h. auſtralior ♂ 16′ 54″
5 55 55 ♂ in hor.
6 0 10 St. in h. auſtralior ♂ 16′ 58″
6 4 7 ♂ in hor.
8 21 St. in h. auſtralior ♂ 16′ 59″
6 12 22 ♂ in hor.
16 35 St. in h. auſtralior ♂ 16′ 59″.

6^h 20′ 54″ ♂ in hor.
25 6 St. in h. auſtralior ♂ 17′ 3″

6 28 8 ♂ in hor.
32 19 St. in h. auſtralior ♂ 17′ 9″.

Nov. 18 veſp. cum eadem ſtella

5^h 34′ 10″ ♂ in hor.
35 19 St. in h. auſtralior ♂ 26′ 35″

5 37 27 ♂ in hor.
38 34 St. in h. auſtralior ♂ 26′ 38″

5 41 2 ♂ in hor.
42 8 St. in h. auſtralior ♂ 26′ 37″

5 45 0 ♂ in hor.
46 6 St. in h. auſtralior ♂ 26′ 43″

5 48 0 ♂ in hor.
49 6 St. in h. auſtralior ♂ 26′ 43″

5 54 39 ♂ diſt. ab earum bo-realiore 43′ 24″

5 57 0 Ab hac auſtraliore 30′ 42″.

Dec. 6 veſpere cœpi comparare ♂^tem cum ſtella ι ♑.

5^h 3′ 9″ ♂ in hor.
12 47 St. in h. borealior ♂ 40′ 48″

5 18 26 ♂ in hor.
28 2 St. in h. borealior ♂ 40′ 43″.

Dec. 7 veſpere

5^h 17′ 25″ ♂ in hor.
23 56 St. in h. borealior ♂ 26′ 49″

5 34 6 ♂ in hor.
40 34 St. in h. borealior ♂ 26′ 47″

5 44 3 ♂ in hor.
50 30 St. in h. borealior ♂ 26′ 42″.

Dec. 8 veſpere

5^h 38′ 19″ ♂ in hor.
41 43 St. in h. borealior ♂ 12′ 50″

5 44 19 ♂ in hor.
47 42 St. in h. borealior ♂ 12′ 50″.

5^h 51′ 7″ ♂ in hor.
54 28 St. in h. borealior ♂
12′ 42″
6 5 1 ♂ in hor.
8 21 St. in h. borealior ♂
12′ 34″.

Dec. 9 veſpere
5^h 47′ 22″ ♂ in hor.
42 St. in h. auſtralior ♂
0′ 59″
5 56 4 ♂ in hor.
23 St. in h. auſtralior ♂
1′ 6″
6 7 58 ♂ in hor.
8 15 St. in h. auſtralior ♂
1′ 16″
6 11 50 ♂ in hor.
12 7 St. in h. auſtralior ♂
1′ 16″
6 16 5 ♂ diſt. a ſtella
3′ 37″
7 19 1 ♂ in hor.
9 St. in h. auſtralior ♂
1′ 56″
7 23 29 ♂ in hor.
36 St. in h. auſtralior ♂
2′ 2″

7^h 28′ 40″ ♂ in hor.
47 St. in h. auſtralior ♂
2′ 1″
7 39 27 ♂ in hor.
32 St. in h. auſtralior ♂
2′ 7″
7 43 14 ♂ in hor.
19 St. in h. auſtralior ♂
2′ 13″
7 46 59 ♂ in hor.
47 3 St. in h. auſtralior ♂
2′ 11″
8 1 9 ♂ in hor.
11½ St. in h. auſtralior ♂
2′ 21″.

Non licuit proſequi per vapores horizont.

Dec. 10 veſpere
5^h 49′ 59″ St. ι in hor.
52 45 ♂ in h. boreal. ſtellâ
15′ 6″
5 54 56 St. ι in hor.
57 42 ♂ in h. boreal. ſtellâ
15′ 22″
6 0 42 St. ι in hor.
3 30 ♂ in h. boreal. ſtellâ
15′ 16″.

6^h 5′ 15″ St. ι in hor.
8 4 ♂ in h. boreal. ſtellâ 15′ 34″
6 10 12 St. ι in hor.
13 1 ♂ in h. boreal. ſtellâ 15′ 24″
5 15 56 ♂ diſt. a ſtella 43′ 6″.

Dec. 11 veſpere
5^h 33′ 2″ St. ι in hor.
38 50 ♂ in h. boreal. ſtellâ 29′ 27″
5 43 44 St. ι in hor.
49 33 ♂ in h. boreal. ſtellâ 29′ 30″
5 52 55 St. ι in hor.
58 44 ♂ in h. boreal. ſtellâ 29′ 40″
6 1 26 St. ι in hor.
7 17 ♂ in h. boreal. ſtellâ 29′ 45″.

Dec. 23 veſpere ♂ cum ſtella ι ♒
5^h 45′ 27″ ♂ in hor.
48 7 St. in h. auſtralior ♂ 46′ 25″

5^h 51′ 46″ ♂ in hor.
54 27 St. in h. auſtralior ♂ 46′ 25″
5 58 2 ♂ in hor.
6 0 42 St. in h. auſtralior ♂ 46′ 25″
6 3 58 ♂ in hor.
6 37 St. in h. auſtralior ♂ 46′ 25″.

Dec. 31 veſp. ♂ cum σ ♒
6^h 0′ 24″ ♂ in hor.
4 1 St. in h. borealior ♂ 6′ 20″
6 7 13 ♂ in hor.
10 49 St. in h. borealior ♂ 6′ 14″
6 13 32 ♂ in hor.
17 8 St. in h. borealior ♂ 6′ 10″.

An. 1748.

Anno 1748.

Jan. 1 veſp. ♂^{tem} cum eadem ſtella σ ♒ comparavi

5^h 53′ 43″ ♂ in hor.
54 29 St. in h. borealior ♂
10′ 31″
5 58 2 ♂ in hor.
47 St. in h. borealior ♂
10′ 37″
6 1 43 ♂ in hor.
2 27 St. in h. borealior ♂
10′ 35″.

Febr. 26 veſp. cœpi comparare ♂^{tem} cum ζ in lino ♓.

6^h 15′ 33″ ♂ in hor.
23 38 St. in h. borealior ♂
49′ 28″
6 29 42 ♂ in hor.
37 46 St. in h. borealior ♂
49′ 38″.

Febr. 27 veſpere

6^h 6′ 19″ ♂ in hor.
11 42 St. in h. borealior ♂
31′ 46″

6^h 14′ 48″ ♂ in hor.
20 9 St. in h. borealior ♂
31′ 40″
6 24 54 ♂ in hor.
30 15 St. in h. borealior ♂
31′ 33″
6 38 50 ♂ in hor.
44 8 St. in h. borealior ♂
31′ 30″
6 48 28 ♂ in hor.
54 45 St. in h. borealior ♂
31′ 15″.

Febr. 29 veſpere

6^h 7′ 36″ St. in hor.
40 ♂ in h. boreal. ſtellâ
3′ 36″
6 16 1 St. in hor.
6 ♂ in h. boreal. ſtellâ
3′ 39″
6 23 51 St. in hor.
58 ♂ in h. boreal. ſtellâ
3′ 45″
6 28 23 St. in hor.
30 ♂ in h. boreal. ſtellâ
3′ 45″.

6^h 30′ 0″ ♂ diſt. a ſtella ζ 4′ 15″.

Sept. 8 mane cœpi comparare ♂^tem cum Regulo α ♌.

4^h 40′ 0″ ♂ occidentalior ſtella 0′ 53½″ penduli, idque ex pluribus operationibus ante & poſt repetitis, eratque ♂ borealior ſtellâ 51′ 32″, & diſtantia ♂^tis a ſtella 53′ 12″.

Sept. 9 mane

4^h 36′ 12″ St. α ♌ in hor.
37 45 ♂ in h. boreal. ſtellâ 38′ 53″
4 39 49 St. α ♌ in hor.
41 22 ♂ in h. boreal. ſtellâ 38′ 51″
4 44 5 St. α ♌ in hor.
45 38 ♂ in h. boreal. ſtellâ 38′ 42″
4 47 41 St. α ♌ in hor.
49 14 ♂ in h. boreal. ſtellâ 38′ 45″

4^h 51′ 50″ ♂ diſt. a ſtella 44′ 49″.

Sept. 11 mane

4^h 25′ 11″ St. α ♌ in hor.
31 31 ♂ in h. boreal. ſtellâ 12′ 46″
4 34 12 St. α ♌ in hor.
40 32 ♂ in h. boreal. ſtellâ 12′ 52″
4 42 42 St. α ♌ in hor.
49 2 ♂ in h. boreal. ſtellâ 12′ 48″.

Sept. 15 mane

4^h 25′ 49½″ St. α ♌ in hor.
41 57 ♂ in h. boreal. ſtellâ 39′ 14″
4 45 57½ St. α ♌ in hor.
5 2 9 ♂ in h. boreal. ſtellâ 39′ 22″
5 5 12½ St. α ♌ in hor.
21 26 ♂ in h. boreal. ſtellâ 39′ 43″.

Oct. 6 mane cœpi comparare ♂^tem cum σ ♌.

5^h 28′ 38″ ♂ in hor.
35 40 St. in h. auſtralior ♂ 14′ 2″.

$5^h\ 37'\ 44''$ ♂ in hor.
44 45 St. in h. auſtralior ♂ $13'\ 54''$

5 47 28 ♂ in hor.
54 27 St. in h. auſtralior ♂ $13'\ 51''$.

Oct. 7 mane

$5^h\ 30'\ 52''$ ♂ in hor.
35 34 St. in h. jam bor. ♂ $0'\ 14''$

5 37 38 ♂ in hor.
42 19 St. in h. borealior ♂ $0'\ 9''$

5 44 49 ♂ in hor.
49 29 St. in h. borealior ♂ $0'\ 14''$

5 53 46 ♂ in hor.
58 25 St. in h. borealior ♂ $0'\ 19''$.

Oct. 8 mane

$5^h\ 36'\ 44''$ ♂ in hor.
39 6 St. in h. borealior ♂ $14'\ 47''$

5 43 36 ♂ in hor.
45 56 St. in h. borealior ♂ $14'\ 47''$.

Oct. 9 mane

$5^h\ 27'\ 57''$ ♂ in hor.
28 0 St. in h. borealior ♂ $29'\ 13''$

5 31 22 ♂ in hor.
24 St. in h. borealior ♂ $29'\ 16''$

5 36 38 ♂ in hor.
40 St. in h. borealior ♂ $29'\ 16''$

5 42 3 ♂ in hor.
4 St. in h. borealior ♂ $29'\ 18''$

5 48 39 ♂ in hor.
40 St. in h. borealior ♂ $29'\ 26''$

5 56 35 ♂ in hor.
36 St. in h. borealior ♂ $29'\ 30''$.

Oct. 21 mane cœpi comparare ♂tem cum ſtella β ♍

$5^h\ 20'\ 6''$ ♂ in hor.
21 47 St. in h. auſtralior ♂ $47'\ 19''$

5 24 25 ♂ in hor.
26 7 St. in h. auſtralior ♂ $47'\ 8''$

5 27 52 ♂ in hor.
29 32 St. in h. auſtralior ♂ $47'\ 14''$.

5^h 31′ 4″ ♂ in hor.
32 43 St. in h. auſtralior ♂
47′ 19″
5 49 48 ♂ in hor.
51 27 St. in h. auſtralior ♂
47′ 1″
5 53 23 ♂ in hor.
55 1 St. in h. auſtralior ♂
47′ 1″
5 56 11 ♂ in hor.
57 49 St. in h. auſtralior ♂
46′ 58″
6 4 6 ♂ in hor.
5 43 St. in h. auſtralior ♂
46′ 58″
6 10 33 ♂ in hor.
12 10 St. in h. auſtralior ♂
46′ 50″
6 17 0 ♂ in hor.
18 37 St. in h. auſtralior ♂
46′ 50″
6 19 56 ♂ in hor.
21 32 St. in h. auſtralior ♂
46′ 37″.

Oct. 22 mane
5^h 28′ 22″ St. in hor.
59 ♂ in h. boreal. ſtellâ
32′ 21″

5^h 35′ 43″ St. in hor.
26 20 ♂ in h. boreal. ſtellâ
32′ 21″
5 45 5 St. in hor.
43 ♂ in h. boreal. ſtellâ
32′ 9″.

Oct. 23 mane
5^h 53′ 43″ St. in hor.
56 40 ♂ in h. boreal. ſtellâ
17′ 9″
5 58 42 St. in hor.
6 1 39 ♂ in h. boreal. ſtellâ
17′ 6″
6 3 11 St. in hor.
6 9 ♂ in h. boreal. ſtellâ
17′ 6″
6 7 49 St. in hor.
10 47 ♂ in h. boreal. ſtellâ
17′ 3″.

Oct. 24 mane
5^h 20′ 16″ St. in hor.
25 27 ♂ in h. boreal. ſtellâ
2′ 42″
5 28 43 St. in hor.
33 55 ♂ in h. boreal. ſtellâ
2′ 31″.

5^h 36′ 20″ St. in hor.
41 34 ♂ in h. boreal. ſtellâ
2′ 31″
5 44 3 St. in hor.
49 17 ♂ in h. boreal. ſtellâ
2′ 30″
5 51 51 St. in hor.
57 6 ♂ in h. boreal. ſtellâ
2′ 28″
5 59 56 St. in hor.
6 5 12 ♂ in h. boreal. ſtellâ
2′ 17″
6 7 59 St. in hor.
13 15 ♂ in h. boreal. ſtellâ
2′ 15″.

Oct. 25 mane
5^h 33′ 48″ St. in hor.
41 18 ♂ in h. jam auſt. ſtellâ
12′ 4″
5 43 6 St. in hor.
50 37 ♂ in h. auſtral. ſtellâ
12′ 16″
5 52 27 St. in hor.
59 59 ♂ in h. auſtral. ſtellâ
12′ 22″
6 2 29 St. in hor.
10 2 ♂ in h. auſtral. ſtellâ
12′ 22″

6^h 12′ 41″ St. in hor.
20 15 ♂ in h. auſtral. ſtellâ
12′ 29″.

Nov. 1 mane ♂ cum ſtella ν in pectore ♍.
5^h 24′ 39″ ♂ in hor.
30 33 St. in h. auſtralior ♂
30′ 34″
5 32 30 ♂ in hor.
38 25 St. in h. auſtralior ♂
30′ 20″
5 40 51 ♂ in hor.
46 44 St. in h. auſtralior ♂
30′ 24″
5 49 26 ♂ in hor.
55 18 St. in h. auſtralior ♂
30′ 20″
5 56 59 ♂ in hor.
6 2 50 St. in h. auſtralior ♂
30′ 15″.

Nov. 3 mane ♂ cum eadem
5^h 38′ 30″ ♂ in hor.
39 51 St. in h. auſtralior ♂
0′ 50″.

5^h 42′ 1″ ♂ in hor.
43 22 St. in h. auſtralior ♂
0′ 40″
5 47 23 ♂ in hor.
48 42 St. in h. auſtralior ♂
0′ 33″
5 51 9 ♂ in hor.
52 29 St. in h. auſtralior ♂
0′ 32″
5 55 47 ♂ in hor.
57 6 St. in h. auſtralior ♂
0′ 33″.

Nov. 4 mane
6^h 17′ 29″ St. ♉ in hor.
18 29 ♂ in h. auſtral. ſtellâ
14′ 20″
6 22 23 St. ♉ in hor.
23 23 ♂ in h. auſtral. ſtellâ
14′ 20″
6 25 34 St. ♉ in hor.
26 35 ♂ in h. auſtral. ſtellâ
14′ 28″.

Dec. 5 mane ♂ cum *m* ♍
5^h 6′ 43″ ♂ in hor.
16 30 St. in h. auſtralior ♂
25′ 40″

5^h 18′ 50″ ♂ in hor.
28 35 St. in h. auſtralior ♂
25′ 37″
5 44 28 ♂ in hor.
54 11 St. in h. auſtralior ♂
vacat.

Dec. 7 mane cum eadem
4^h 54′ 21″ ♂ in hor.
59 36 St. in h. jam bor. ♂
1′ 45″
5 1 46 ♂ in hor.
7 1 St. in h. borealior ♂
2′ 0″
5 15 49 ♂ in hor.
21 1 St. in h. borealior ♂
1′ 52″ d.
5 23 3 ♂ in hor.
28 15 St. in h. borealior ♂
2′ 6″
5 31 52 ♂ in hor.
37 3 St. in h. borealior ♂
2′ 6″
5 39 20 ♂ in hor.
44 30 St. in h. borealior ♂
2′ 18″.

Anno 1749.

Jan. 7 mane cœpi comparare ♂tem cum α ♎.

5h 26′ 30″ ♂ in hor.
28 34 St. in h. auſtralior ♂ 56′ 35″
5 33 19 ♂ in hor.
35 22 St. in h. auſtralior ♂ 56′ 35″
5 42 38 ♂ in hor.
44 41 St. in h. auſtralior ♂ 56′ 32″
5 51 15 ♂ diſt. a ſtella 1° 3′ 54″.

Jan. 9 mane
5h 47′ 40″ St. in hor.
50 16 ♂ in h. boreal. ſtellâ vacat.
5 52 44 St. in hor.
55 20 ♂ in h. boreal. ſtellâ 33′ 30″
5 57 0 St. in hor.
59 36 ♂ in h. boreal. ſtellâ 33′ 35″.

Jan. 10 mane
5h 4′ 36″ St. in hor.
9 29 ♂ in h. boreal. ſtellâ 22′ 54″
5h 12′ 47″ St. in hor.
17 40 ♂ in h. boreal. ſtellâ 22′ 40″
5 19 45 St. in hor.
24 39 ♂ in h. boreal. ſtellâ 22′ 54″
5 28 39 St. in hor.
33 32 ♂ in h. boreal. ſtellâ 22′ 43″
5 35 36 St. in hor.
40 30 ♂ in h. boreal. ſtellâ 22′ 48″
5 44 59 St. in hor.
49 54 ♂ in h. boreal. ſtellâ 22′ 39″
5 51 59 St. in hor.
56 54 ♂ in h. boreal. ſtellâ 22′ 36″
5 59 25 St. in hor.
6 4 21 ♂ in h. boreal. ſtellâ 22′ 30″.

Jan. 11 mane
4h 30′ 42″ St. in hor.
37 50 ♂ in h. boreal. ſtellâ 12′ 5″.

4^h 39′ 37″ St. in hor.
46 45 ♂ in h. boreal. ſtellâ
12′ 2″

4 50 14 St. in hor.
57 23 ♂ in h. boreal. ſtellâ
11′ 58″

4 59 6 St. in hor.
5 6 16 ♂ in h. boreal. ſtellâ
11′ 58″

5 8 53 St. in hor.
16 4 ♂ in h. boreal. ſtellâ
11′ 48″.

Jan. 12 mane
3^h 53′ 26″ St. in hor.
4 2 52 ♂ in h. boreal. ſtellâ
1′ 22″

4 4 53 St. in hor.
14 19 ♂ in h. boreal. ſtellâ
1′ 10″

4 17 20 St. in hor.
26 47 ♂ in h. boreal. ſtellâ
1′ 14″

4 30 30 St. in hor.
39 59 ♂ in h. boreal. ſtellâ
1′ 8″

4 42 33 St. in hor.
52 2 ♂ in h. boreal. ſtellâ
1′ 4″

4^h 54′ 21″ St. in hor.
5 3 51 ♂ in h. boreal. ſtellâ
1′ 0″

5 5 46 St. in hor.
15 17 ♂ in h. boreal. ſtellâ
0′ 54″

5 19 53 St. in hor.
29 26 ♂ in h. boreal. ſtellâ
0′ 49″

5 32 2 St. in hor.
41 37 ♂ in h. boreal. ſtellâ
0′ 38″

5 44 45 St. in hor.
54 20 ♂ in h. boreal. ſtellâ
0′ 36″

5 56 58 St. in hor.
6 6 34½ ♂ in h. boreal. ſtellâ
0′ 26″.

Jan. 13 mane ♂ medius inter α ♎
& ν ♎ comparatus
cum utraque
3^h 42′ 18″ St. α in hor.
54 4 ♂ in h. auſtral. ſtellâ
α 9′ 14″
57 54 St. ν in h. auſtr. ſtellâ
α 16′ 59″.

4^h

4^h	2′	15″	St. α in hor.
	14	1	♂ in h. auſtral. ſtellà α 9′ 28″.
	17	50	St. ν in h. auſtr. ſtellà α 16′ 55″
4	22	12	St. α in hor.
	33	58	♂ in h. auſtral. ſtellâ α 9′ 28″
	37	47	St. ν in h. auſtr. ſtellà α 16′ 50″
4	42	28	St. α in hor.
	54	17	♂ in h. auſtral. ſtellà α 9′ 37″
	58	2	St. ν in h. auſtr. ſtellà α 16′ 51″
5	2	8	St. α in hor.
	13	58	♂ in h. auſtral. ſtellà α 9′ 45″
	17	42	St. ν in h. auſtr. ſtellâ α 16′ 51″
5	20	24	St. α in hor.
	32	17	♂ in h. auſtral. ſtellà α 9′ 48″
	35	59	St. ν in h. auſtr. ſtellà α 16′ 51″.

Febr. 3 mane cœpi comparare ♂tem cum ſtel. β ♏.

3^h	6′	44″	♂ in hor.
	19	39	St. in h. auſtralior ♂ 34′ 50″
3	39	29	♂ in hor.
	52	21	St. in h. auſtralior ♂ 34′ 29″
3	55	56	♂ in hor.
4	8	48	St. in h. auſtralior ♂ 34′ 25″
4	16	16	♂ in hor.
	29	5	St. in h. auſtralior ♂ 34′ 20″
4	30	56	♂ in hor.
	43	45	St. in h. auſtralior ♂ 34′ 13″.

Febr. 5 mane

3^h	27′	9″	♂ in hor.
	35	23½	St. in h. auſtralior ♂ 17′ 52″
3	39	23	♂ in hor.
	47	36½	St. in h. auſtralior ♂ 17′ 46″
3	51	34	♂ in hor.
	59	46	St. in h. auſtralior ♂ 17′ 46″
4	1	23	♂ in hor.
	9	33	St. in h. auſtralior ♂ 17′ 44″.

4^h 12′ 55″ ♂ in hor.
21 6 St. in h. auſtralior ♂ 17′ 44″
4 26 54 ♂ in hor.
35 1 St. in h. auſtralior ♂ 17′ 40″
4 38 16 ♂ in hor.
46 23 St. in h. auſtralior ♂ 17′ 33″.

Febr. 7 mane
5^h 11′ 20″ ♂ in hor.
14 46 St. in h. auſtralior ♂ 1′ 8″
5 18 34 ♂ in hor.
21 58 St. in h. auſtralior ♂ 1′ 8″
5 24 6 ♂ in hor.
27 29 St. in h. auſtralior ♂ 1′ 8″
5 29 11 ♂ in hor.
32 34 St. in h. auſtralior ♂ 1′ 8″
5 36 43 ♂ diſt. a ſtella 47′ 59″.

Febr. 8 mane
4^h 4′ 58″ ♂ diſt. a β ♏ 19′ 54″.

4^h 8′ 23″ ♂ diſt. ab ω ♏ borealiore 57′ 53″
4 16 3 ♂ in hor.
17 13 St. β ♏ in h. bor. ♂ 6′ 7″
4 20 42 ♂ in hor.
21 52 St. β ♏ in h. bor. ♂ 6′ 8″
4 24 32 ♂ in hor.
25 41 St. β ♏ in h. bor. ♂ 6′ 8″
4 30 49 ♂ in hor.
31 58 St. β ♏ in h. bor. ♂ 6′ 12″
4 32 41 ♂ in hor.
33 49½ St. β ♏ in h. bor. ♂ 6′ 16″
4 36 24 ♂ diſt. a β ♏ 17′ 13″.

Febr. 9 mane
4^h 38′ 1″ ♂ diſt. ab ω ♏ borealiore 37′ 53″
4 48 38 ♂ diſt. a β ♏ 22′ 0″
4 45 35 St. β ♏ in hor.
46 48 ♂ in h. auſtral. ſtellâ 14′ 0″.

4^h 49′ 26″ St. β ♏ in hor.
50 39 ♂ in h. auſtral. ſtellâ
14′ 2″
4 52 53 St. β ♏ in hor.
54 6 ♂ in h. auſtral. ſtellâ
14′ 4″.

Febr. 10 mane ſtabat ♂ inter ſtellas ν, β & ω ♏, &

3^h 41′ 45″ ♂ diſt. a ν in occid.
59′ 44″
46 0 ♂ diſt. ab ω auſtraliore 48′ 5″
49 0 ♂ diſt. ab ω borealiore 43′ 7″
53 0 ♂ diſt. a β ♏
53′ 9″
3 56 21 St. β ♏ in hor.
59 48 ♂ in h. auſtral. ſtellâ
21′ 32″
4 3 17 St. β ♏ in hor.
6 45 ♂ in h. auſtral. ſtellâ
21′ 29″
4 9 41 St. β ♏ in hor.
13 9 ♂ in h. auſtral. ſtellâ
21′ 33″

4^h 14′ 32″ St. β ♏ in hor.
18 1½ ♂ in h. auſtral. ſtellâ
21′ 33″
4 20 16 St. β ♏ in hor.
23 46 ♂ in h. auſtral. ſtellâ
21′ 33″
4 25 24 St. β ♏ in hor.
28 54 ♂ in h. auſtral. ſtellâ
21′ 41″.

Febr. 13 mane
4^h 44′ 26″ St. β ♏ in hor.
54 56 ♂ in h. auſtral. ſtellâ
44′ 14″
4 57 11 St. β ♏ in hor.
5 7 43 ♂ in h. auſtral. ſtellâ
44′ 17″
5 9 55 St. β ♏ in hor.
20 27 ♂ in h. auſtral. ſtellâ
44′ 17″
5 23 13 St. β ♏ in hor.
33 45 ♂ in h. auſtral. ſtellâ
44′ 19″
5 35 44 St. β ♏ in hor.
26 18 ♂ in h. auſtral. ſtellâ
44′ 19″.

Febr. 14 mane cœpi comparare ♂^tem cum ſtella ψ in pede dextro Serpentarii.

5^h	16′	54″	♂ in hor.
	22	35	St. in h. borealior ♂ 31′ 33″
5	34	6	♂ in hor.
	39	45	St. in h. borealior ♂ 31′ 33″
5	42	17	♂ in hor.
	47	54	St. in h. borealior ♂ 31′ 43″
6	0	39	♂ in hor.
	6	15	St. in h. borealior ♂ 31 41″
6	7	59	♂ in hor.
	13	34	St. in h. borealior ♂ 31′ 54″.

Febr. 15 mane

5^h	52′	50″	♂ in hor.
	56	7	St. in h. borealior ♂ 38′ 41″
5	58	41	♂ in hor.
6	1	58	St. in h. borealior ♂ 38′ 45″
6	4	4	♂ in hor.
	7	21	St. in h. borealior ♂ 38′ 45″.

Febr. 16 mane

4^h	38′	22″	♂ in hor.
	39	31	St. in h. borealior ♂ 45′ 19″
4	41	43	♂ in hor.
	42	50	St. in h. borealior ♂ 45′ 28″
4	44	57	♂ in hor.
	46	4	St. in h. borealior ♂ 45′ 19″
4	47	29	♂ in hor.
	48	35	St. in h. borealior ♂ 45′ 28″
4	50	52	♂ in hor.
	51	59	St. in h. borealior ♂ 45′ 22″
4	54	29	♂ diſt. a ſtella 48′ 3″.

Maji 19 mane cœpi comparare ♂^tem cum ſtella ψ in tergo Sagittarii.

2^h	11′	39″	♂ in hor.
	26	12	St. in h. borealior ♂ 32′ 9″
2	29	54	♂ in hor.
	44	28	St. in h. borealior ♂ 32′ 4″.

2ʰ 49′ 15″ ♂ in hor.
3 3 49 St. in h. borealior ♂ 32′ 11″.

Maji 20 mane
2ʰ 24′ 22″ ♂ in hor.
38 34 St. in h. borealior ♂ 28′ 41″
2 41 32 ♂ in hor.
55 44 St. in h. borealior ♂ 28′ 39″
3 1 3 ♂ in hor.
15 15 St. in h. borealior ♂ 28′ 39″.

Maji 22 mane
1ʰ 13′ 17″ ♂ in hor.
26 55 St. in h. borealior ♂ 21′ 54″.

Maji 25 mane
3ʰ 10′ 38″ ♂ in hor.
23 47 St. in h. borealior ♂ 9′ 11″
3 27 7 ♂ in hor.
40 17 St. in h. borealior ♂ 9′ 0″

3ʰ 43′ 11″ ♂ in hor.
56 20 St. in h. borealior ♂ 9′ 0″.

Maji 26 mane
3ʰ 19′ 21″ ♂ in hor.
32 28 St. in h. borealior ♂ 5′ 55″
3 36 40 ♂ in hor.
49 46 St. in h. borealior ♂ 5′ 59″
3 52 12 ♂ in hor.
4 5 19 St. in h. borealior ♂ 5′ 59″.

Maji 27 mane
2ʰ 27′ 24″ ♂ in hor.
40 31 St. in h. borealior ♂ 2′ 6″
2 43 59 ♂ in hor.
57 6 St. in h. borealior ♂ 2′ 4″
2 59 36 ♂ in hor.
3 12 43 St. in h. borealior ♂ 2′ 4″.

Eodem 27 mane cœpi comparare ♂^{tem} cum ſtella σ ♐ in humero dextro Sagittarii.

3^h 28′ 16″ St. σ in hor.
35 31 ♂ in h. boreal. ſtellâ 57′ 6″
3 38 56 St. σ in hor.
46 11 ♂ in h. boreal. ſtellâ 56′ 56″
4 3 28 St. σ in hor.
10 44 ♂ in h. boreal. ſtellâ 56′ 56″
4 13 12 St. σ in hor.
20 27 ♂ in h. boreal. ſtellâ 56′ 44″.

Maji 28 mane
3^h 35′ 24″ St. σ in hor.
42 36 ♂ in h. boreal. ſtellâ 52′ 42″
3 44 45 St. σ in hor.
51 57 ♂ in h. boreal. ſtellâ 52′ 42″
3 55 19 St. σ in hor.
4 2 31 ♂ in h. boreal. ſtellâ 52′ 42″
4 7 14 St. σ in hor.
14 26 ♂ in h. boreal. ſtellâ 52′ 36″.

Maji 29 mane
3^h 18′ 30″ St. σ in hor.
25 34 ♂ in h. boreal. ſtellâ 48′ 26″
3 28 23 St. σ in hor.
35 27 ♂ in h. boreal. ſtellâ 48′ 27″
3 40 46 St. σ in hor.
47 51 ♂ in h. boreal. ſtellâ 48′ 26″
4 1 19 St. σ in hor.
8 24 ♂ in h. boreal. ſtellâ 48′ 22″.

Jun. 4 mane
3^h 21′ 21″ St. σ in hor.
26 36 ♂ in h. boreal. ſtellâ 21′ 1″
3 28 30 St. σ in hor.
33 45 ♂ in h. boreal. ſtellâ 20′ 55″
3 35 33 St. σ in hor.
40 47 ♂ in h. boreal. ſtellâ 20′ 55″
3 44 59 St. σ in hor.
50 13 ♂ in h. boreal. ſtellâ 20′ 55″.

Optabam equidem obſervare ♂^{tem} perigæum, ſed 9 Junii profectus in Tartariam ad deſcri-

bendam mappam topographicam locorum, ubi Imperator ſe & ſuos venatione exercere ſolet; non redivi niſi 26 Julii, ubi ♂ jam ad ſecundam ſtationem pervenit.

Aug. 29 veſpere cœpi comparare ♂tem cum φ ♐ ante humer. dextrum Sagittarii.

7h 37′ 19″ ♂ in hor.
49 42 St. in h. borealior ♂ 31′ 13″
7 52 2 ♂ in hor.
8 4 24 St. in h. borealior ♂ 31′ 13″
8 11 8 ♂ in hor.
23 29 St. in h. borealior ♂ 31′ 5″
8 26 6 ♂ in hor.
38 27 St. in h. borealior ♂ 30′ 59″
8 40 53 ♂ in hor.
53 13 St. in h. borealior ♂ 30′ 59″.

Aug. 30 veſpere
6h 57′ 53″ ♂ in hor.
7 8 40 St. in h. borealior ♂ 28′ 28″
7h 10′ 42″ ♂ in hor.
21 29 St. in h. borealior ♂ 28′ 25″
7 23 12 ♂ in hor.
33 58 St. in h. borealior ♂ 28′ 24″
7 35 53½ ♂ in hor.
46 39 St. in h. borealior ♂ 28′ 24″.

Aug. 31 veſpere
8h 8′ 28″ ♂ in hor.
17 32 St. in h. borealior ♂ 25′ 24″
8 22 36 ♂ in hor.
31 38 St. in h. borealior ♂ 25′ 33″
8 34 53 ♂ in hor.
43 54 St. in h. borealior ♂ 25′ 24″
8 50 50 ♂ in hor.
59 0 St. in h. borealior ♂ 25′ 18″
9 4 2 ♂ in hor.
13 2 St. in h. borealior ♂ 25′ 17″.

Sept. 1 veſpere
7^{h} 3′ 10″ ♂ in hor.
10 36 St. in h. borealior ♂
22′ 50″
7 12 56 ♂ in hor.
20 21 St. in h. borealior ♂
22′ 48″
7 22 21 ♂ in hor.
29 46 St. in h. borealior ♂
22′ 48″.

Sept. 5 veſpere
8^{h} 19′ 8″ ♂ in hor.
21 11 St. in h. borealior ♂
12′ 56″
8 25 8 ♂ in hor.
27 10 St. in h. borealior ♂
12′ 50″
8 29 16 ♂ in hor.
31 18 St. in h. borealior ♂
12′ 50″
8 36 42 ♂ in hor.
38 44 St. in h. borealior ♂
12′ 46″.

Sept. 10 veſp. ♂ denuo cum σ ♐
7^{h} 14′ 1″ ♂ in hor.
20 St. in h. borealior ♂
29′ 25″.

Operatio unica, ſed viſa tuta.

Sept. 12 veſpere
6^{h} 42′ 39″ St. in hor.
46 23 ♂ in h. auſtral. ſtellâ
21′ 12″
6 57 6 St. in hor.
7 0 51 ♂ in h. auſtral. ſtellâ
21′ 10″
7 3 17 St. in hor.
7 3 ♂ in h. auſtral. ſtellâ
21′ 6″
7 14 34 St. in hor.
18 21 ♂ in h. auſtral. ſtellâ
21′ 3″
7 21 18 St. in hor.
25 56 ♂ in h. auſtral. ſtellâ
20′ 59″.

Sept. 13 veſpere
6^{h} 35′ 57″ St. in hor.
41 44 ♂ in h. auſtral. ſtellâ
16′ 43″
6 43 35 St. in hor.
49 24 ♂ in h. auſtral. ſtellâ
16′ 44″.

6^{h}

6^h 50′ 51″ St. in hor.
56 41 ♂ in h. auſtral. ſtellâ 16′ 39″
6 68 5 St. in hor.
7 3 55 ♂ in h. auſtral. ſtellâ 16′ 35″
7 6 10 St. in hor.
12 1 ♂ in h. auſtral. ſtellâ 16′ 39″.

Sept. 14 veſpere
6^h 37′ 50″ St. in hor.
45 46 ♂ in h. auſtral. ſtellâ 12′ 12″
6 47 19 St. in hor.
55 16 ♂ in h. auſtral. ſtellâ 12′ 16″
6 57 47 St. in hor.
7 5 45 ♂ in h. auſtral. ſtellâ 12′ 4″.

Sept. 16 veſpere
7^h 11′ 58″ St. in hor.
24 16 ♂ in h. auſtral. ſtellâ 2′ 35″
7 27 10 St. in hor.
39 30 ♂ in h. auſtral. ſtellâ 2′ 45″

7^h 42′ 32″ St. in hor.
54 43 ♂ in h. auſtral. ſtellâ 2′ 33″.

Sept. 26 veſp. comparare cœpi ♂ item cum ſtella *h* majore duarum & auſtraliore in cubito ſiniſtro Sagittarii.
8^h 10′ 40″ ♂ in hor.
17 2 St. in h. borealior ♂ 16′ 53″
8 19 43 ♂ in hor.
26 5 St. in h. borealior ♂ 16′ 57″
8 28 19 ♂ in hor.
34 39 St. in h. borealior ♂ 16′ 51″
8 36 59 ♂ in hor.
43 19 St. in h. borealior ♂ 16′ 50″
8 45 26 ♂ in hor.
51 45 St. in h. borealior ♂ 16′ 48″.

Sept. 28 veſpere
7^h 8′ 41″ ♂ in hor.
10 20 St. in h. borealior ♂
4′ 18″
7 13 20 ♂ in hor.
15 0 St. in h. borealior ♂
4′ 18″.

Sept. 29 veſpere
7^h 26′ 0″ St. in hor.
48 ♂ in h. boreal. ſtellâ
2′ 15″.
Operatio viſa tuta.

Nov. 7 veſpere cœpi comparare ♂^{tem} cum ſtella ι ♑.
6^h 4′ 57″ ♂ in hor.
9 10 St. in h. borealior ♂
54′ 15″
6 11 11 ♂ in hor.
15 24 St. in h. borealior ♂
54′ 6″
6 17 6 ♂ in hor.
21 17 St. in h. borealior ♂
54′ 13″
6 25 9 ♂ in hor.
29 20 St. in h. borealior ♂
54′ 5″

6^h 31′ 17″ ♂ in hor.
35 28 St. in h. borealior ♂
54′ 0″.

Nov. 9 veſpere
6^h 14′ 45″ St. in hor.
15 56 ♂ in h. auſtral. ſtellâ
27′ 19″
6 18 27 St. in hor.
19 40 ♂ in h. auſtral. ſtellâ
27′ 10″
6 23 11 St. in hor.
24 24 ♂ in h. auſtral. ſtellâ
27′ 8″
6 26 5 St. in hor.
27 18 ♂ in h. auſtral. ſtellâ
26′ 58″.

Nov. 11 veſpere
5^h 49′ 56″ St. in hor.
56 28 ♂ in h. differ. declin.
0′ 0″
5 58 37 St. in hor.
6 5 9 ♂ in h. differ. declin.
0′ 0″.

Nempe in utraque hac operatione ♂ decurrit ipſum filum fixum, quod ſtella decurrerat ſine differentia declinationis.

6^h 6′ 54″ St. in hor.
13 26 ♂ in h. boreal. ſtellâ, quanta eſt Semidiameter ♂^{tis}.

Nov. 12 veſp. cœpi comparare ♂^{tem} cum ſtella γ ♑ in cauda Capricorni.

5^h 25′ 35″ ♂ in hor.
34 19 St. in h. auſtralior ♂ 7′ 21″
5 36 35 ♂ in hor.
45 17 St. in h. auſtralior ♂ 7′ 28″
5 46 55 ♂ in hor.
55 38 St. in h. auſtralior ♂ 7′ 27″
5 59 1 ♂ in hor.
6 7 42 St. in h. auſtralior ♂ 7′ 32″
6 10 0 ♂ in hor.
18 38 St. in h. auſtralior ♂ 7′ 54″ err.
6 21 46 ♂ in hor.
30 23 St. in h. auſtralior ♂ 7′ 52″ err.

Nov. 14 veſpere

5^h 36′ 47″ ♂ in hor.
40 8 St. in h. auſtralior ♂ 35′ 47″
5 42 38 ♂ in hor.
45 58 St. in h. auſtralior ♂ 35′ 55″
5 48 37 ♂ in hor.
51 58 St. in h. auſtralior ♂ 35′ 50″.

Nov. 15 veſpere

5^h 51′ 50″ ♂ in hor.
52 29 St. in h. auſtralior ♂ 50′ 20″.
Obſervatio viſa tuta.

Nov. 24 veſp. ♂ cum ι ♒

5^h 45′ 57″ ♂ in hor.
49 12 St. in h. auſtralior ♂ 22′ 59″
5 51 56 ♂ in hor.
55 8 St. in h. auſtralior ♂ 23′ 5″
5 58 46 ♂ in hor.
6 1 59 St. in h. auſtralior ♂ 23′ 7″.

6ʰ 6′ 43″ ♂ in hor.
9 55 St. in h. auſtralior ♂
23′ 15″.

Nov. 25 veſp. ♂ cum eadem
5ʰ 51′ 53″ ♂ in hor.
52 26½ St. in h. auſtralior ♂
38′ 41″.

Dec. 2 veſpere cœpi comparare ♂tem cum ſtella σ ♒ in coxendice ſiniſtra Aquarii
5ʰ 7′ 40″ ♂ in hor.
14 11 St. in h. borealior ♂
36′ 47″
5 15 50 ♂ in hor.
22 20 St. in h. borealior ♂
36′ 41″
5 23 53 ♂ in hor.
30 21¼ St. in h. borealior ♂
36′ 33″.

Dec. 3 veſpere
5ʰ 13′ 49″ ♂ in hor.
17 41 St. in h. borealior ♂
20′ 18″
5ʰ 19′ 36″ ♂ in hor.
23 27½ St. in h. borealior ♂
20′ 14″
5 31 48 ♂ in hor.
35 37½ St. in h. borealior ♂
20′ 10″
5 40 29 ♂ diſt. a ſtella
59′ 34″.

Dec. 4 veſpere
5ʰ 11′ 24½″ ♂ in hor.
12 39 St. in h. borealior ♂
3′ 55″
5 15 4½ ♂ in hor.
16 18½ St. in h. borealior ♂
3′ 48″
5 22 37 ♂ in hor.
23 50 St. in h. borealior ♂
3′ 42″
5 28 40 ♂ diſt. a ſtella
17′ 49″.

Dec. 5 veſpere
5ʰ 10′ 4″ St. in hor.
11 29 ♂ in h. boreal. ſtellâ
12′ 28″.

5^h 13′ 17″ St. in hor.
14 42 ♂ in h. boreal. ſtellà
12′ 35″
5 15 48 St. in hor.
17 14 ♂ in h. boreal. ſtellà
12′ 28″
5 18 55 St. in hor.
20 22 ♂ in h. boreal. ſtellà
12′ 31″
5 22 42 St. in hor.
24 9 ♂ in h. boreal. ſtellà
12′ 31″
5 37 3 ♂ diſt. a ſtella
24′ 52″.

Dec. 6 veſpere
5^h 9′ 4″ St. in hor.
13 8 ♂ in h. boreal. ſtellà
29′ 6″
5 15 19 St. in hor.
19 23 ♂ in h. boreal. ſtellà
29′ 11″
5 20 39 St. in hor.
24 44 ♂ in h. boreal. ſtellà
29′ 19″.

Dec. 15 veſpere ♂ cum χ ♒ in aqua urnæ Aquarii.

5^h 38′ 23″ St. in hor.
43 59½ ♂ in h. boreal. ſtellà
0′ 10″
5 55 11½ St. in hor.
6 6 50 ♂ in h. boreal. ſtellà
0′ 27″
6 7 37 St. in hor.
13 18 ♂ in h. boreal ſtellà
0′ 34″
6 16 24 St. in hor.
22 5 ♂ in h. boreal. ſtellà
0′ 36″.

Dec. 16 veſp. ♂ cum eadem
5^h 12′ 22″ St. in hor.
20 34½ ♂ in h. boreal. ſtellà
17′ 17″
5 32 39 St. in hor.
40 53 ♂ in h. boreal. ſtellà
17′ 32″
5 45 16 St. in hor.
53 32 ♂ in h. boreal. ſtellà
17′ 49″.

Dec. 18 veſp. cœpi comparare ♂^{tem} cum ſtella φ ♒.

5h 54′ 49″ ♂ in hor.
6 3 7 St. in h. borealior ♂ 37′ 42″
6 15 48 ♂ in hor.
23 3 St. in h. borealior ♂ 37′ 28″.

Dec. 19 veſpere
5h 8′ 31½″ ♂ in hor.
14 18 St. in h. borealior ♂ 20′ 39″
5 16 16 ♂ in hor.
22 2 St. in h. borealior ♂ 20′ 35″
5 32 7 ♂ in hor.
37 51½ St. in h. borealior ♂ 20′ 24″
5 40 14 ♂ in hor.
45 57 St. in h. borealior ♂ 20′ 21″.

Dec. 20 veſp. & primum
5h 5′ 34″ ♂ diſt. a ſtella φ 47′ 19″
5 9 12 ♂ in hor.
12 22 St. in h. borealior ♂ 3′ 15″

5h 14′ 22″ ♂ in hor.
17 31 St. in h. borealior ♂ 3′ 9″
5 19 5 ♂ in hor.
22 14 St. in h. borealior ♂ 3′ 3″.

Dec. 22 veſpere
5h 6′ 7″ St. in hor.
8 11 ♂ in h. boreal. ſtellâ 31′ 54″
5 9 52 St. in hor.
11 55 ♂ in h. boreal. ſtellâ 31′ 54″
5 16 40 St. in hor.
18 44 ♂ in h. boreal. ſtellâ 32′ 2″
5 20 25 St. in hor.
22 29 ♂ in h. boreal. ſtellâ 32′ 2″
5 24 58 ♂ diſt. a ſtella 44′ 33″.

Anno 1750.

Febr. 3 veſp. comparatus ♂ cum ſtella ζ ♓ in lino Piſcium

6^h 6′ 35″ St. in hor.
11 5 ♂ in h. auſtral. ſtellâ 37′ 10″
6 14 10 St. in hor.
18 39 ♂ in h. auſtral. ſtellâ 37′ 2″
6 20 41 St. in hor.
25 10 ♂ in h. auſtral. ſtellâ 37′ 4″.

6^h 5′ 39″ ♂ in hor.
6 42 St. in h. auſtralior ♂ 13′ 59″
6 10 5 ♂ in hor.
11 7 St. in h. auſtralior ♂ 14′ 1″
6 20 14 St. ζ ♓ in hor.
29 54 St. ε ♓ in h. auſtral. ſtella ζ 2′ 52″.

Febr. 4 veſpere

5^h 43′ 20″ St. in hor.
50 22 ♂ in h. auſtral. ſtellâ 20′ 21″
5 53 3 St. in hor.
6 0 6 ♂ in h. auſtral. ſtellâ 20′ 20″
6 5 8 St. in hor.
12 11½ ♂ in h. auſtral. ſtellâ 20′ 7″.

Febr. 5 veſpere ♂ cum ſtella ε ♓ in lino Piſcium

5^h 58′ 9″ ♂ in hor.
59 11 St. in h. auſtralior ♂ 13′ 53″

Mart. 14 veſp. ♂ cum ſtella π ♈

6^h 32′ 48″ St. in hor.
34 39½ ♂ in h. auſtral. ſtellâ 26′ 26″
6 38 48 St. in hor.
40 39½ ♂ in h. auſtral. ſtellâ 26′ 20″
6 43 51 St. in hor.
45 42 ♂ in h. auſtral. ſtellâ 26′ 20″.

Mart. 25 veſp. ♂ cum ſtella δ ♈

7^h 40′ 13″ St. in hor.
50 4 ♂ in h. auſtral. ſtellâ 30′ 40″.

$7^h\ 55'\ 41''$ St. in hor.
8 5 35 ♂ in h. auſtral. ſtellâ
30′ 24″.

April. 10 veſp. ♂ cum ſtella A ♉
$7^h\ 23'\ 3''$ St. in hor.
24 43 ♂ in h. auſtral. ſtellâ
22′ 27″
7 42 10 St. in hor.
43 52½ ♂ in h. auſtral. ſtellâ
22′ 16″
7 51 9 St. in hor.
52 52 ♂ in h. auſtral. ſtellâ
22′ 11″.

Oct. 15 mane ♂ cum ſtella η ♍
$5^h\ 49'\ 2''$ ♂ in hor.
50 19 St. in h. borealior ♂
14′ 41″
5 52 42 ♂ in hor.
53 58 St. in h. borealior ♂
14′ 39″
5 55 10 ♂ in hor.
56 26 St. in h. borealior ♂
14′ 43″.

Nov. 5 mane cum θ ♍
$5^h\ 42'\ 6''$ ♂ in hor.
43 36 St. in h. borealior ♂
44′ 11″.
Idem iterum tuto.

Nov. 24 mane cœpi comparare ♂tem cum α ♍ ſpica Virginis.
$6^h\ 7'\ 49''$ St. in hor.
37 19 ♂ in h. boreal. ſtellâ
11′ 50″ tuto.

Nov. 25 mane
$5^h\ 11'\ 31''$ St. in hor.
43 20 ♂ in h. auſtral. ſtellâ
2′ 0″
5 47 46 St. in hor.
6 19 38 ♂ in h. auſtral ſtellâ
2′ 19″
6 24 53 St. in hor.
56 48 ♂ in h. auſtral. ſtellâ
2′ 45″.

Nov. 26 mane
$5^h\ 4'\ 54''$ St. in hor.
39 9 ♂ in h. auſtral. ſtellâ
16′ 24″
5^h

5^h 42′ 5″ St. in hor.
6 16 24 ♂ in h. auſtral. ſtellâ
16′ 33″
6 18 21 St. in hor.
52 44½ ♂ in h. auſtral. ſtellâ
16′ 51″.

Dec. 4 mane ♂ cum λ ♍ in pede Virginis
5^h 39′ 35″ St. in hor.
40 14 ♂ in h. boreal. ſtellâ
13′ 37″.
Obſervatio bis repetita & tuta.

Dec. 18 mane cœpi comparare ♂tem cum ſtellis α ♎ & ν ♎
6^h 35′ 29″ St. α in hor.
40 19 ♂ in h. auſtral. ſtellâ
2′ 58″
6 41 24 St. α in hor.
46 14 ♂ in h. auſtral. ſtellâ
3′ 3″
6 48 1 St. α in hor.
52 51 ♂ in h. auſtral. ſtellâ
3′ 8″.

Dec. 19 mane
6^h 27′ 19″ St. α in hor.
34 43½ ♂ in h. auſtral. ſtellâ α 15′ 24″
42 55½ St. ν in h. auſtr. ſtellâ α 17′ 2″
6 44 32 St. α in hor.
51 58 ♂ in h. auſtral. ſtellâ α 15′ 21″
7 0 7 St. ν in h. auſtr. ſtellâ α 17′ 2″.

Dec. 20 mane
5^h 51′ 0″ St. α in hor.
6 0 55 ♂ in h. auſtral. ſtellâ α 27′ 15″
6 35 St. ν in h. auſtr. ſtellâ α 17′ 5″
6 9 6 St. α in hor.
19 3 ♂ in h. auſtral. ſtellâ α 27′ 26″
24 42 St. ν in h. auſtr. ſtellâ α 17′ 2″
6 28 47 St. α in hor.
38 46 ♂ in h. auſtral. ſtellâ α 27′ 32″
44 22½ St. ν in h. auſtr. ſtellâ α 17′ 2″.

Anno 1751.

Jan. 12 mane cœpi comparare ♂tem cum ſtella β ♏.

5h	1′	58″	♂ in hor.
	4	50	St. in h. borealior ♂ 27′ 19″
5	6	25	♂ in hor.
	9	15	St. in h. borealior ♂ 27′ 19″
5	12	27	♂ in hor.
	15	17	St. in h. borealior ♂ 27′ 19″
5	17	0	♂ diſt. a ſtella 48′ 41″.

Jan. 13 mane

4h	55′	58″	♂ in hor.
	56	6½	St. in h. borealior ♂ 36′ 14″
5	3	8	♂ in hor.
		16	St. in h. borealior ♂ 36′ 25″
5	15	39	♂ in hor.
		45	St. in h. borealior ♂ 36′ 31″
5	26	40	♂ in hor.
		44½	St. in h. borealior ♂ 36′ 31″

5h	38′	50″	♂ in hor.
		53½	St. in h. borealior ♂ 36′ 43″
5	58	50	♂ in hor.
		51	St. in h. borealior ♂ 36′ 49″
6	28	47	St. β in hor.
		50	♂ in h. auſtral. ſtellâ 36′ 0″
6	33	22	St. β in hor.
		25½	♂ in h. auſtral. ſtellâ 37′ 2″
6	37	45	St. β in hor.
		49	♂ in h. auſtral. ſtellâ 37′ 1″.

Jan. 14 mane

6h	29′	17″	St. β in hor.
	32	5	♂ in h. auſtral. ſtellâ 45′ 54″
6	33	47	St. β in hor.
	36	34	♂ in h. auſtral. ſtellâ 46′ 4″
6	38	19	St. β in hor.
	41	8	♂ in h. auſtral. ſtellâ 46′ 3″.

Febr. 11 mane ♂ cum ſtella C in talo pedis ſiniſtri Ophiuchi.

5^h 20′ 44″ ♂ in hor.
24 37 St. in h. auſtralior ♂ 49′ 0″
5 40 38 ♂ in hor.
44 29 St. in h. auſtralior ♂ 49′ 0″
5 56 30 ♂ in hor.
6 0 19 St. in h. auſtralior ♂ 48′ 45″
6 9 10 ♂ in hor.
12 59 St. in h. auſtralior ♂ 48′ 37″
6 14 45 ♂ in hor.
18 33 St. in h. auſtralior ♂ 48′ 37″.

Febr. 20 mane cœpi comparare ♂^{tem} cum ſtel. quadam informi, quæ in Zod. ſtel. Flamſt. ad an. 1690 ponitur in ♐ 25° 37′. cum lat. a. 0° 20′.

5^h 16′ 20″ ♂ in hor.
22 39 St. in h. auſtralior ♂ 20′ 44″
5^h 25′ 49″ ♂ in hor.
32 7 St. in h. auſtralior ♂ 20′ 44″.
5 33 47 ♂ in hor.
40 5 St. in h. auſtralior ♂ 20′ 44″.

Nempe optabam obſervare tranſitum ♂^{tis} per Eclipticam, ſed dies erant nubili & nivoſi.

Febr. 24 mane ♂ cum eadem ſtella & alia ſequente ibi in ♐ 28° 23″ cum lat. auſtr. 0° 14″.

5^h 40′ 48″ St. prior in hor.
46 5 ♂ in h. boreal. ſtellâ 12′ 3″
52 45 St. ſequens in h. bor. priore 2′ 6″
5 55 15 St. prior in hor.
6 0 43 ♂ in h. boreal. ſtellâ 12′ 10″
7 11 St. ſequens in h. bor. priore 2′ 25″.

Et poſterior hæc operatio viſa tutior priore.

Febr. 25 mane ♂ cum iiſdem

5^h 15′ 47″ St. prior in hor.

23 57 ♂ in h. boreal. ſtellâ 10′ 42″

27 43 St. ſeq. in h. boreal. priore 2′ 15″

5 29 42 St. prior in hor.

37 52 ♂ in h. boreal. ſtellâ 10′ 34″

41 37 St. ſeq. in h. boreal. priore 2′ 23″.

Febr. 26 mane

5^h 48′ 45″ ♂ in hor.

49 39 St. ſeq. in h. auſtr. ♂ 7′ 5″

Obſervatio tuta ex pluribus.

Maji 9 mane ♂ cum ſtellis γ & δ in cauda ♑.

4^h 22′ 8″ ♂ in hor.

31 59 St. γ in h. boreal. ♂ 2′ 46″

39 0 St. δ in h. boreal. ♂ 34′ 38″.

Maji 12 mane ♂ cum γ ♑.

2^h 38′ 36″ ♂ in hor.

41 1 St. γ in h. auſtral. ♂ 25′ 22″

2 50 8 ♂ in hor.

52 32 St. γ in h. auſtral. ♂ 25′ 28″

2 54 35 ♂ in hor.

56 59 St. γ in h. auſtral. ♂ 25′ 28″

3 18 6 ♂ in hor.

20 28 St. γ in h. auſtral. ♂ 25′ 37″

3 23 35 ♂ in hor.

25 55 St. γ in h. auſtral. ♂ 25′ 37″

3 32 19 ♂ in hor.

34 39 St. γ in h. auſtral. ♂ 25′ 45″.

Hac occaſione comparatæ inter ſe ſtellæ γ & δ ♑.

3 36 51 St. γ in hor.

43 52 St. δ in h. b. ſtellâ γ 31′ 35″

3 51 48 St. γ in hor.

58 47 St. δ in h. b. ſtellâ γ 31′ 42″.

4^h 0′ 17″ St. γ in hor.
7 17 St. δ in h. b. ſtellâ γ 31′ 48″
4 19 24 St. γ in hor.
26 24 St. δ in h. b. ſtellâ γ 31′ 42″
4 28 40 St. γ in hor.
35 40 St. δ in h. b. ſtellâ γ 31′ 49″.

Maji 13 mane ♂ cum δ ♑.
2^h 51′ 52″ ♂ in hor.
58 45 St. δ in h. auſtral. ♂ 3′ 26″
3 1 31 ♂ in hor.
8 24 St. δ in h. auſtral. ♂ 3′ 26″.

Jul. 17 mane cœpi comparare ♂^{tem} cum ſtella, quæ in Zod. ſtell. Flamſt. ponitur in ♓ 23°40′ cum lat. auſtr. 5°40′, eſtque maxime auſtralis ab æquatore in illo quadrilatero oblongo. Quia ea ſequentibus etiam menſibus ſæpius utor, brevitatis cauſa eam hic appellabo *a*, & proxime ſequentem ſociam vocabo *b*.

2^h 24′ 29″ ♂ in hor.
34 40 St. *a* in h. auſtral. ♂ 4′ 22″
2 41 45 ♂ in hor.
51 55 St. in h. auſtralior ♂ 4′ 26″
2 54 47 ♂ in hor.
3 4 58 St. in h. auſtralior ♂ 4′ 30″
4 5 6 ♂ in hor.
15 13 St. in h. auſtralior ♂ 4′ 52″
4 16 44 ♂ in hor.
26 50 St. in h. auſtralior ♂ 4′ 52″.

Jul. 20 mane ♂ comparatus cum utraque *a* & *b*.
3^h 2′ 13″ ♂ in hor.
8 36 St. *a* in h. auſtral. ♂ 20′ 5″
11 59½ St. *b* in h. auſtral. ♂ 2′ 23″.

a = 30 pisc.
b = 33 —

3^h 15′ 56″ ♂ in hor.
22 18 St. *a* in h. auſtral. ♂ 20′ 9″
25 41½ St. *b* in h. auſtral. ♂ 2′ 12″

3 30 29 ♂ in hor.
36 51 St. *a* in h. auſtral. ♂ 20′ 14″
40 14 St. *b* in h. auſtral. ♂ 2′ 15″

3 44 36 ♂ in hor.
50 58 St. *a* in h. auſtral. ♂ 20′ 18″
54 21½ St. *b* in h. auſtral. ♂ 2′ 23″

3 57 47 ♂ in hor.
4 4 8 St. *a* in h. auſtral. ♂ 20′ 14″
7 31 St. *b* in h. auſtral. ♂ vacat.

4 10 18 ♂ in hor.
16 39 St. *a* in h. auſtral. ♂ 20′ 24″
20 3 St. *b* in h. auſtral. ♂ vacat.

4 23 25 ♂ in hor.
29 45 St. *a* in h. auſtral. ♂ 20′ 19″ d.
33 8 St. *b* in h. auſtral. ♂ 2′ 28″.

Nempe ſtella *a* occidentalior eſt ſtellâ *b* 3′ 23½″ penduli. Eademque auſtralior 17′ 54½″ circuli.

Jul. 24 mane ♂ cum iiſdem
1^h 59′ 31″ ♂ in hor.
2 1 24 St. *a* in h. auſtral. ♂ 37′ 36″
4 48 St. *b* in h. auſtral. ♂ 19′ 46″

2 8 10 ♂ in hor.
10 3 St. *a* in h. auſtral. ♂ 37′ 20″
13 27 St. *b* in h. auſtral. ♂ 19′ 38″

2 20 9 ♂ in hor.
22 2 St. *a* in h. auſtral. ♂ 37′ 34″
25 25 St. *b* in h. auſtral. ♂ 19′ 40″

2 48 12 ♂ in hor.
50 3 St. *a* in h. auſtral. ♂ 37′ 42″

2 56 25 ♂ in hor.
58 16 St. *a* in h. auſtral. ♂ 37′ 46″.

3^h 1′ 40″ St. *b* in h. auſtral. ♂ 19′ 56″
3 12 39 ♂ in hor.
14 29 St. *a* in h. auſtral. ♂ 37′ 51″
17 53 St. *b* in h. auſtral. ♂ vacat.
3 44 3 ♂ in hor.
45 53 St. *a* in h. auſtral. ♂ 37′ 57″
49 17 St. *b* in h. auſtral. ♂ 20′ 9″
4 4 29 ♂ in hor.
6 18 St. *a* in h. auſtral. ♂ 37′ 45″
9 41 St. *b* in h. auſtral. ♂ 19′ 54″
4. 12 39 ♂ in hor.
14 27 St. *a* in h. auſtral. ♂ 38′ 3″
17 51 St. *b* in h. auſtral. ♂ 20′ 9″.

Igitur ſtella *a* occidentalior ſtellâ *b* 3′ 24″ penduli, eademque auſtralior 17′ 51″ circuli.

Sept. 1 mane ♂ cum ſtella *b*

5^h 0′ 36″ ♂ in hor.
1 4 St. in h. borealior ♂ 15′ 11″
5 3 35 ♂ in hor.
4 2 St. in h. borealior ♂ 15′ 13″
5 6 41 ♂ in hor.
7 8 St. in h. borealior ♂ 15′ 15″.

Sept. 6 mane ♂ cum ſtella *a*.

3^h 30′ 2″ ♂ in hor.
31 37 St. in h. borealior ♂ 21′.17″
3 36 19 ♂ in hor.
37 54 St. in h. borealior ♂ 21′ 17″
3 40 11 ♂ in hor.
41 46 St. in h. borealior ♂ 21′ 17″
4 4 2 ♂ in hor.
5 39 St. in h. borealior ♂ 21′ 35″
4 10 1 ♂ in hor.
11 38 St. in h. borealior ♂ 21′ 35″
4 27 1 ♂ in hor.
28 38 St. in h. borealior ♂ 21′ 31″.

4^h 29′ 53″ ♂ in hor.
31 31 St. in h. borealior ♂
21′ 31″.

Sept. 6 veſp. ♂ cum eadem ſtella *a* tentandæ parallaxeos cauſa

7^h 55′ 55½″ ♂ in hor.
58 10½ St. in h. borealior ♂
24′ 31″
8 1 19 ♂ in hor.
3 35 St. in h. borealior ♂
24′ 35″
8 5 28 ♂ in hor.
7 43 St. in h. borealior ♂
24′ 29″
8 10 24 ♂ in hor.
12 40 St. in h. borealior ♂
24′ 31″
8 19 38 ♂ in hor.
21 54½ St. in h. borealior ♂
24′ 35″
8 23 37 ♂ in hor.
25 52½ St. in h. borealior ♂
24′ 35″
8 29 8 ♂ in hor.
31 24 St. in h. borealior ♂
24′ 41″

8^h 33′ 39″ ♂ in hor.
35 55 St. in h. borealior ♂
24′ 39″
8 52 26 ♂ in hor.
54 42½ St. in h. borealior ♂
24′ 45″
8 56 40 ♂ in hor.
58 57½ St. in h. borealior ♂
24′ 46″
9 2 50½ ♂ in hor.
5 8 St. in h. borealior ♂
24′ 46″
9 9 11 ♂ in hor.
11 28 St. in h. borealior ♂
24′ 43″
9 26 46 ♂ in hor.
29 4 St. in h. borealior ♂
24′ 49″
9 31 4½ ♂ in hor.
33 23 St. in h. borealior ♂
24′ 52″
9 35 8 ♂ in hor.
37 27 St. in h. borealior ♂
24′ 56″
9 54 34 ♂ in hor.
56 53 St. in h. borealior ♂
24′ 58″
10 0 13 ♂ in hor.
2 33 St. in h. borealior ♂
25′ 6″.

10^h

10ʰ 4′ 54″ ♂ in hor.
7 14 St. in h. boreal. ♂
25′ 2″
10 8 53 ♂ in hor.
11 13 St. in h. boreal. ♂
25′ 6″
10 32 39 ♂ in hor.
35 0 St. in h. boreal. ♂
25′ 8″
10 37 40 ♂ in hor.
40 1 St. in h. boreal. ♂
25′ 9″
10 42 46½ ♂ in hor.
45 8 St. in h. boreal. ♂
25′ 18″
10 46 53 ♂ in hor.
49 14½ St. in h. boreal. ♂
25′ 9″
10 59 12 ♂ in hor.
11 1 34 St. in h. boreal. ♂
25′ 14″
11 3 58 ♂ in hor.
6 21 St. in h. boreal. ♂
25′ 21″
11 8 1 ♂ in hor.
10 24 St. in h. boreal. ♂
25′ 21″
11 12 12 ♂ in hor.
14 35 St. in h. boreal. ♂
25′ 19″

11ʰ 29′ 38″ ♂ in hor.
32 2½ St. in h. boreal. ♂
25′ 19″
11 33 51 ♂ in hor.
36 14 St. in h. boreal. ♂
25′ 17″
11 37 8 ♂ in hor.
39 32 St. in h. boreal. ♂
25′ 22″
11 43 35 ♂ in hor.
45 59½ St. in h. boreal. ♂
25′ 25″
11 49 34 ♂ in hor.
51 58½ St. in h. boreal. ♂
25′ 23″.

Sept. 7 mane poſt med. noct.
0ʰ 13′ 31″ ♂ in hor.
15 58 St. in h. borealior ♂
25′ 28″
0 18 40 ♂ in hor.
21 5 St. in h. borealior ♂
25′ 37″
0 24 18 ♂ in hor.
26 45 St. in h. borealior ♂
25′ 37″
0 34 4 ♂ in hor.
36 31 St. in h. borealior ♂
25′. 28″ d.

0h	39′	2″	♂ in hor.	
	41	29	St. in h. borealior ♂	25′ 39″
0	43	49	♂ in hor.	
	46	16	St. in h. borealior ♂	25′ 33″
0	48	0	♂ in hor.	
	50	28	St. in h. borealior ♂	25′ 33″
0	52	17	♂ in hor.	
	54	44½	St. in h. borealior ♂	25′ 35″
0	56	12½	♂ in hor.	
	58	40	St. in h. borealior ♂	25′ 39″
3	28	30	♂ in hor.	
	31	5	St. in h. borealior ♂	26′ 8″
3	33	14	♂ in hor.	
	35	49	St. in h. borealior ♂	26′ 11″
3	39	6	♂ in hor.	
	41	41½	St. in h. borealior ♂	26′ 10″
3	45	4	♂ in hor.	
	47	40	St. in h. borealior ♂	26′ 12″
3	50	45	♂ in hor.	
	53	21	St. in h. borealior ♂	26′ 16′

3h	56′	16″	♂ in hor.	
	58	52	St. in h. borealior ♂	26′ 17″
4	7	34	♂ in hor.	
	10	11	St. in h. borealior ♂	26′ 17″
4	11	52	♂ in hor.	
	14	29	St. in h. borealior ♂	26′ 22″
4	16	46	♂ in hor.	
	19	23	St. in h. borealior ♂	26′ 16″
4	28	8	♂ in hor.	
	30	45	St. in h. borealior ♂	26′ 24″
4	34	5	♂ in hor.	
	36	44	St. in h. borealior ♂	26′ 18″
4	39	5	♂ in hor.	
	41	44	St. in h. borealior ♂	26′ 22″
4	44	16	♂ in hor.	
	46	54½	St. in h. borealior ♂	26′ 20″
4	54	24	♂ in hor.	
	57	3	St. in h. borealior ♂	26′ 22″
4	59	40	♂ in hor.	
5	2	20	St. in h. borealior ♂	26′ 18″.

...e
...' ♂ in hor.
St. *a* in h. boreal. ♂
31′ 7″
... ♂ in hor.
... St. in h. borealior ♂
30′ 9″
...6 ♂ in hor.
5 St. in h. borealior ♂
30′ 7″
33 ♂ in hor.
13 St. in h. borealior ♂
30′ 9″.

... 9 mane
... 1′ 30″ ♂ in hor.
6 9 St. *a* in h. boreal. ♂
35′ 45″
18 56½ ♂ in hor.
23 36 St. in h. borealior ♂
35′ 45″
31 21 ♂ in hor.
36 1 St. in h. borealior ♂
35′ 45″.

Sept. 9 veſpere
8^h 34′ 4″ ♂ in hor.
39 28 St. in h. borealior ♂
39′ 2″
8^h 41′ 26½″ ♂ in hor.
46 51 St. in h. borealior ♂
39′ 2″
8 48 48 ♂ in hor.
54 13 St. in h. borealior ♂
39′ 6″.

Sept. 10 mane
4^h 1′ 11″ ♂ in hor.
6 57 St. in h. borealior ♂
40′ 36″
4 10 16½ ♂ in hor.
16 3 St. in h. borealior ♂
40′ 40″
4 18 25 ♂ in hor.
24 11 St. in h. borealior ♂
40′ 40″.

Sept. 10 veſpere
8^h 31′ 55″ ♂ in hor.
38 25 St. in h. borealior ♂
43′ 40″
8 40 44 ♂ in hor.
47 13 St. in h. borealior ♂
43′ 42″
8 48 43 ♂ in hor.
55 14 St. in h. borealior ♂
43′ 44″.

$8^h\ 56'\ 57''$ ♂ in hor.
9 30 27 St. in h. borealior ♂ $43'\ 44''$.

Sept. 11 mane
$3^h\ 42'\ 11''$ ♂ in hor.
49 1 St. in h. borealior ♂ $45'\ 11''$
3 50 53 ♂ in hor.
57 44 St. in h. borealior ♂ $45'\ 17''$
4 0 43 ♂ in hor.
7 35 St. in h. borealior ♂ $45'\ 19''$
4 10 27 ♂ in hor.
17 19 St. in h. borealior ♂ $45'\ 21''$
4 19 8 ♂ in hor.
26 1 St. in h. borealior ♂ $45'\ 23''$.

Sept. 12 veſp. tubo 3 ped.
$8^h\ 35'\ 45''$ ♂ in hor.
44 28 St. in h. borealior ♂ $52'\ 15''$
8 47 4 ♂ in hor.
55 47 St. in h. borealior ♂ $52'\ 21''$

$8^h\ 57'\ 40''$ ♂ in hor.
9 6 23 St. in h. borealior ♂ $52'\ 15''$.

Sept. 15 mane tubo 3 ped.
$4^h\ 6'\ 57''$ ♂ in hor.
18 28 St. in h. borealior ♂ $1^\circ\ 1'\ 47''$.
Neque plus per nubes licuit, & incidit in hunc diem ☍ ☉ ♂.

Sept. 17 mane tubo 3 ped.
$2^h\ 52'\ 26''$ ♂ in hor.
3 4 51 St. in h. borealior ♂ $1^\circ\ 5'\ 43''$
3 9 8 ♂ in hor.
21 31 St. in h. borealior ♂ $1^\circ\ 5'\ 53''$
3 27 1 ♂ in hor.
39 29 St. in h. borealior ♂ $1^\circ\ 5'\ 51''$.

Dec. 31 veſp. ♂ cum ſt. ε in lino ♓
$5^h\ 39'\ 32''$ St. in hor.
40 34 ♂ in h. auſtral. ſtellâ $42'\ 2''$
5 46 0 ♂ diſt. a ſtella $44'\ 38''$.

Anno 1752.

Febr. 27 veſp. ♂ cum ſtella δ ♈

$8^h\ 30'\ 5''$ St. in hor.

35 34 ♂ in h. auſtral. ſtellâ $20'\ 52''$

8 38 56 St. in hor.

44 25 ♂ in h. auſtral. ſtellâ $20'\ 50''$

8 53 43 St. in hor.

59 13 ♂ in h. auſtral. ſtellâ $20'\ 48''$.

Mart. 16 veſp. ♂ cum ſtella A ♉

$7^h\ 39'\ 54''$ ♂ in hor.

41 16 St. in h. borealior ♂ $6'\ 18''$

7 44 25 ♂ in hor.

45 46 St. in h. borealior ♂ $6'\ 18''$

7 48 36 ♂ in hor.

49 57 St. in h. borealior ♂ $6'\ 18''$.

Mart. 17 veſp. ♂ cum eadem

$8^h\ 1'\ 12''$ St. in hor.

2 $28\frac{1}{2}$ ♂ in h. boreal. ſtellâ $2'\ 6''$

8 4 7 St. in hor.

5 24 ♂ in h. boreal. ſtellâ $2'\ 11''$

8 7 5 St. in hor.

8 22 ♂ in h. boreal. ſtellâ $2'\ 11''$.

Mart. 13 veſp. ♂ cum ε ♊

$8^h\ 8'\ 41''$ ♂ in hor.

11 42 St. in h. borealior ♂ $42'\ 34''$

8 14 12 ♂ in hor.

17 13 St. in h. borealior ♂ $42'\ 34''$.

§. IV.

VENUS CUM FIXIS.

Anno 1746.

Nov. 5 veſpere cum teleſcopium in ♀^{rem} intendiſſem, comparaturus eam cum ſtella φ ♐, vidi prope eandem ſtellulam quandam aliam 5ta magnitudinis, cum qua eam interea comparavi, ut hic ſequitur:

5^h 58′ 0″	♀ occidental. ſtellâ	2′ 23″	penduli, & boreal.	6′ 53″	
6 5 0	— — —	2 22	— — —	7 1	
6 10 0	— — —	2 21	— — —	7 5.	

Porro hanc ſtellulam nec in Zod. ſtell. nec in Cat. Britan. Flamſtedii inveni; igitur poſtero die

Nov. 6 veſpere comparata eadem ſtellula cum φ ♐, ſic:

5^h 48′ 43″ Stellula in hor.
6 16 18 St. φ ♐ in h. auſtral. priore 6′ 59″.

Nov. 7 veſp. ♀ cum φ ♐
5^h 51′ 41″ ♀ in hor.
6 12 40 St. in h. auſtralior ♀ 13′ 33″.

Nov. 8 veſpere
5^h 54′ 15″ ♀ in hor.
6 11 45 St. in h. auſtralior ♀ 14′ 32″.

Nov. 11. veſpere
5^h 38′ 50″ ♀ in hor.
42 12 St. in h. auſtralior ♀ 20′ 40″
5 48 19 ♀ in hor.
51 41 St. in h. auſtralior ♀ 20′ 40″
5 58 16 ♀ in hor.
6 11 19 St. σ ♐ in h. bor. ♀ 17′ 19″.

Nov. 12 veſpere
5^h 25′ 42″ St. ♁ in hor.
26 38 ♀ in h. boreal. ſtellâ
23′ 51″
5 37 1 St. ♁ in hor.
56 ♀ in h. boreal. ſtellâ
23′ 51″
5 42 9 ♀ in hor.
50 53 St. σ ♐ in h. bor. ♀
14′ 0″.

Nov. 13 veſp. ♀ cum σ ♐
5^h 22′ 46″ ♀ in hor.
27 17 St. in h. borealior ♀
10′ 21″
5 35 26 ♀ in hor.
39 53 St. in h. borealior ♀
10′ 21″
5 59 15 ♀ in hor.
6 3 38 St. in h. borealior ♀
10′ 9″
5 48 52 ♀ diſt. a ſtella
1° 0′ 33″.

Nov. 14 veſpere
5^h 17′ 39″ ♀ in hor.
55 St. in h. borealior ♀
6′ 5″

5^h 22′ 30″ ♀ in hor.
46 St. in h. borealior ♀
6′ 5″
5 30 35 ♀ in hor.
51 St. in h. borealior ♀
6′ 5″
5 37 4 ♀ diſt. a ſtella σ
6′ 38″.

Nov. 15 veſpere
5^h 27′ 18″ St. σ ♐ in hor.
31 15 ♀ in h. auſtral. ſtellâ
1′ 16″
5 34 8 St. σ in hor.
38 7 ♀ in h. auſtral. ſtellâ
1′ 20″
5 41 43 St. σ in hor.
45 43 ♀ in h. auſtral. ſtellâ
1′ 14″
5 53 41 ♀ diſt. a ſtella
53′ 17″.

Nov. 16 veſpere
5^h 17′ 55″ St. in hor.
25 59 ♀ in h. jam bor. ſtellâ
4′ 10″.

5^h 31′ 56″ St. in hor.
40 3 ♀ in h. boreal. ſtellâ 4′ 18″
5 46 22 St. in hor.
54 33 ♀ in h. boreal. ſtellâ 4′ 22″.

Nov. 17 veſp. ♀ comparata cum quad. ſtellula, quæ non eſt in Zod. ſtell. Flamſt. & deinde cum ſtella ψ ♐ inter ſcapulas Sagittarii.
5^h 28′ 56″ ♀ in hor.
34 46 St. in h. auſtralior ♀ 6′ 30″
5 46 4 ♀ in hor.
51 51 St. in h. auſtralior ♀ 6′ 8″ d.
6 7 55 ♀ in hor.
13 41 St. in h. auſtralior ♀ 6′ 28″
15 29 St. ψ ♐ in h. auſtr. ♀ 44′ 34″.

Nov. 19 veſp. ♀ cum ψ ♐
5^h 22′ 42″ ♀ in hor.
48 St. in h. auſtralior ♀ 30′ 55″

5^h 28′ 20″ ♀ in hor.
26 St. in h. auſtralior ♀ 30′ 55″
5 30 30 ♀ in hor.
36 St. in h. auſtralior ♀ 30′ 55″.

Nov. 24 veſp. ♀ cum 2 ſtellis *h* ♐ in cubito ſiniſtro Sagittarii.
5^h 37′ 20″ ♀ in hor.
39 34 St. *h* maj. in h. bor. ♀ 3′ 24″
5 47 20 ♀ ab *h* majore 24′ 54″
5 51 25 ♀ ab *h* minore 25′ 14″.

Nov. 25 veſpere
5^h 27′ 51″ St. *h* maj. in hor.
29 12 ♀ in h. boreal. ſtellâ 6′ 34″
5 31 50 St. in hor.
33 13 ♀ in h. boreal. ſtellâ 6′ 34″
5 37 1 St. in hor.
38 24 ♀ in h. boreal. ſtellâ 6′ 34″.

5^h

$5^h\ 42'\ 3''$ ♀ diſt. ab *h* majore
20′ 9″

5 44 58 ♀ diſt. ab *h* minore
28′ 10″.

Eſt autem major occidentalior & auſtralior quam minor.

Dec. 8 veſp. ♀ cum ſtella, quæ in Cat. Brit. Flamſt. ponitur in Conſtellatione Capricorni 4to loco.

$5^h\ 57'\ 57''$ ♀ in hor.
58 21 St. in h. borealior ♀
3′ 23″

6 2 35 ♀ in hor.
3 0 St. in h. borealior ♀
3′ 4″

6 5 22 ♀ in hor.
46 St. in h. borealior ♀
3′ 5″.

Dec. 26 veſpere
$5^h\ 28'\ 0''$ ♀ diſt. a ſtella *υ* ♑ in collo Capricorni
44′ 57″.

Anno 1747.

Jan. 8 veſpere proxime horizontem comparata ♀ cum ſtella β ♑ in cornu dextro Capricorni.

$5^h\ 37'\ 2''$ St. in hor.
41 20 ♀ in h. auſtral. ſtellâ
23′ 5″.

Febr. 25 mane comparata ♀ cum ſtella *g* ♐ in extremitate Strophii volantis a tergo Sag.

$5^h\ 28'\ 4''$ ♀ in hor.
18 St. in h. auſtralior ♀
10′ 50″

5 32 3 ♀ in hor.
17 St. in h. auſtralior ♀
10′ 50″.

Febr. 26 mane ♀ cum eadem

5^h 36′ 53″ ♀ diſt. a ſtella 34′ 27″

5 42 26 St. in hor.

44 44 ♀ in h. boreal. ſtellâ 9′ 52″

5 49 10 St. in hor.

51 30 ♀ in h. boreal. ſtellâ 9′ 52″

5 54 46 St. in hor.

57 5 ♀ in h. boreal. ſtellâ 9′ 53″.

Mart. 5 mane cœpi rurſus comparare ♀rem cum ſtella β ♑.

5^h 23′ 36″ ♀ in hor.

24 33 St. in h. borealior ♀ 22′ 27″

5 28 46 ♀ in hor.

29 41 St. in h. borealior ♀ 22′ 27″

5 33 18 ♀ in hor.

34 14 St. in h. borealior ♀ 22′ 18″

5 38 50 ♀ in hor.

39 46 St. in h. borealior ♀ 22′ 28″

5^h 42′ 44″ ♀ in hor.

43 38 St. in h. borealior ♀ 22′ 28″

5 56 0 ♀ diſt. a ſtella 25′ 36″.

Mart. 7 mane

5^h 33′ 44″ St. in hor.

39 9 ♀ in h. boreal. ſtellâ 18′ 32″

5 42 29 St. in hor.

47 56 ♀ in h. boreal. ſtellâ 18′ 3″

5 53 44 St. in hor.

59 12 ♀ in h. boreal. ſtellâ 18′ 9″.

Obſervatio tuta.

Mart. 8 mane

5^h 32′ 44″ St. in hor.

41 25 ♀ in h. boreal. ſtellâ 15′ 42″

5 45 35 St. in hor.

54 17 ♀ in h. boreal. ſtellâ 15′ 28″

5 58 46 St. in hor.

6 7 20 ♀ in h. boreal. ſtellâ 15′ 38″.

Anno 1748.

Febr. 7 veſpere ♀ cum χ ♒

5^h 49′ 45″ ♀ in hor.
58 7 St. in h. auſtralior ♀ 41′ 15″
6 2 35 ♀ in hor.
10 55 St. in h. auſtralior ♀ 41′ 29″
6 12 53 ♀ in hor.
21 12 St. in h. auſtralior ♀ 41′ 32″.

Febr. 8 veſp. ♀ cum φ ♒

5^h 49′ 14″ ♀ in hor.
50 31 St. in h. borealior ♀ 30′ 15″
5 53 38 ♀ in hor.
54 54 St. in h. borealior ♀ 30′ 0″
5 58 21 ♀ in hor.
59 36 St. in h. borealior ♀ 29′ 56″.

Mart. 5 veſp. ♀ cum ζ in lino ♓

6^h 19′ 23″ ♀ in hor.
23 17 St. in h. borealior ♀ 41′ 45″
6^h 26′ 40″ ♀ in hor.
30 34 St. in h. borealior ♀ 41′ 28″.
6 33 21 ♀ in hor.
37 12 St. in h. borealior ♀ 41′ 20″.

Maji 3 veſp. ♀ cum ſtella informi, quæ in Zod. ſtell. Flamſt. ponitur in ♊ 25° 10′ cum lat. bor. 2° 30′.

7^h 45′ 42″ ♀ in hor.
50 22 St. in h. borealior ♂ 8′ 33″
7 54 22 ♀ in hor.
59 1 St. in h. borealior ♂ 8′ 36″
8 3 7 ♀ in hor.
7 44 St. in h. borealior ♂ 8′ 38″
8 11 23 ♀ in hor.
15 59 St. in h. borealior ♀ 8′ 34″.

8^h 19′ 13″ ♀ in hor.
23 47 St. in h. borealior ♀ 8′ 34″.

Maji 13 veſp. cœpi comparare ſtellam ε ♊ in genu dextro Caſtoris.

7^h 56′ 36″ ♀ in hor.
57 53 St. in h. auſtralior ♀ 34′ 21″
8 4 7 ♀ in hor.
5 23 St. in h. auſtralior ♀ 34′ 19″
8 8 28 ♀ in hor.
9 43 St. in h. auſtralior ♀ 34′ 22″
8 13 26 ♀ in hor.
14 39 St. in h. auſtralior ♀ 34′ 23″
8 18 5 ♀ in hor.
19 18 St. in h. auſtralior ♀ 34′ 20″.

Maji 14 veſpere

8^h 0′ 5″ St. ε in hor.
3 42 ♀ in h. boreal. ſtellâ 31′ 52″
8^h 5′ 47″ St. in hor.
9 25 ♀ in h. boreal. ſtellâ 31′ 48″
8 12 18 St. in hor.
15 56 ♀ in h. boreal. ſtellâ 31′ 49″
8 18 53 St. in hor.
22 33 ♀ in h. boreal. ſtellâ 31′ 47″.

Maji 15 veſpere

7^h 58′ 22″ St. in hor.
8 6 49 ♀ in h. boreal. ſtellâ 28′ 29″
8 9 47 St. in hor.
18 16 ♀ in h. boreal. ſtellâ 28′ 22″
8 21 9 St. in hor.
29 42 ♀ in h. boreal. ſtellâ 28′ 26″.

Maji 16 veſpere

7^h 44′ 53″ St. ε in hor.
56 14 St. alia in h. b. ſtella ε 18′ 30″
58 7 ♀ in h. boreal. ſtellâ 24′ 25″.

Maji 17 veſp. ♀ cum ſtella *n* ♊ in latere dextro Caſtoris

8^h 1′ 17″ ♀ in hor.
14 0 St. in h. auſtralior ♀ 23′ 29″
8 17 49 ♀ in hor.
30 33 St. in h. auſtralior ♀ 23′ 44″.

Maji 19 veſpere ♀ cum eadem

7^h 58′ 49″ ♀ in hor.
8 2 3 St. in h. auſtralior ♀ 12′ 52″
8 6 27 ♀ in hor.
9 41 St. in h. auſtralior ♀ 12′ 39″.

Jun. 8 veſpere ♀ cum γ ♋

8^h 2′ 43″ ♀ in hor.
6 58 St. in h. borealior ♀ 41′ 24″
8 8 49 ♀ in hor.
13 3 St. in h. borealior ♀ 41′ 34″
8 15 42 ♀ in hor.
19 54 St. in h. borealior ♀ 41′ 42″.

Jun. 9 veſpere

8^h 0′ 48″ ♀ in hor.
1 5 St. in h. borealior ♀ 57′ 57″
8 7 9 ♀ in hor.
25 St. in h. borealior ♀ 58′ 2″.

Jul. 6 veſpere cum a multis diebus optarem obſervare ♀^{rem} cum Regulo ſeu α ♌ per nubes, non niſi hodie id licuit.

7^h 55′ 42″ St. α ♌ in hor.
56 8 ♀ in h. auſtral. ſtellà 45′ 49″
8 2 3 St. α ♌ in hor.
29 ♀ in h. auſtral. ſtellà 45′ 49″.

Et illico rurſum nubes utrumque obvolvêre.

Jul. 10 veſp. ♀ cum ♀ ♌

7^h 56′ 18″ ♀ in hor.
8 11 51 St. in h. auſtralior ♀ 25′ 47″.

Jul. 11 veſp. ♀ cum eadem

7ʰ 33′ 32″ ♀ in hor.
47 14 St. in h. auſtralior ♀ 5′ 42″
7 51 59 ♀ in hor.
8 5 39 St. in h. auſtralior ♀ 5′ 29″.

Sept. 26 mane cœpi comparare ♀ʳᵉᵐ cum ſtella π ♌.

4ʰ 45′ 24″ ♀ in hor.
56 22 St. in h. auſtralior ♀ 39′ 23″
5 12 11 ♀ in hor.
23 7 St. in h. auſtralior ♀ 39′ 34″
5 25 12 ♀ in hor.
36 7 St. in h. auſtralior ♀ 39′ 28″.

Sept. 27 mane

4ʰ 36′ 31″ ♀ in hor.
45 15 St. in h. auſtralior ♀ 39′ 21″ d.
4 47 19 ♀ in hor.
56 3 St. in h. auſtralior ♀ 38′ 51″
4ʰ 58′ 35″ ♀ in hor.
5 7 20 St. in h. auſtralior ♀ 38′ 47″
5 9 53 ♀ in hor.
18 38 St. in h. auſtralior ♀ 38′ 43″.

Sept. 28 mane

4ʰ 32′ 19″ ♀ in hor.
38 48 St. in h. auſtralior ♀ 37′ 40″
4 40 45 ♀ in hor.
47 14 St. in h. auſtralior ♀ 37′ 34″
4 49 1 ♀ in hor.
55 29 St. in h. auſtralior ♀ 37′ 28″
4 57 47 ♀ in hor.
5 4 13 St. in h. auſtralior ♀ 37′ 41″
5 7 32 ♀ in hor.
13 59 St. in h. auſtralior ♀ 37′ 28″
5 15 36 ♀ in hor.
22 1 St. in h. auſtralior ♀ 37′ 34″
5 24 14 ♀ in hor.
30 39 St. in h. auſtralior ♀ 37′ 28″.

5^h	32′	51″	♀ in hor.
	39	14	St. in h. auſtralior ♀ 37′ 32″.

Oct. 1 mane

4^h	34′	46″	St. π in hor.
	35	40	♀ in h. boreal. ſtellâ 30′ 22″
4	39	47	St. in hor.
	40	42	♀ in h. boreal. ſtellâ 30′ 28″
4	45	1	St. in hor.
		56	♀ in h. boreal. ſtellâ 30′ 22″
4	48	55	St. in hor.
	49	52	♀ in h. boreal. ſtellâ 30′ 7″
4	57	8	St. in hor.
	58	7	♀ in h. boreal. ſtellâ 30′ 15″
5	0	43	St. in hor.
	1	41	♀ in h. boreal. ſtellâ 30′ 9″
5	6	2	St. in hor.
	7	1	♀ in h. boreal. ſtellâ 30′ 15″
5	16	57	St. in hor.
	17	57	♀ in h. boreal. ſtellâ 30′ 11″

5^h	21′	18″	St. in hor.
	22	18	♀ in h. boreal. ſtellâ 30′ 7″.

Oct. 10 mane ♀ cum ſtellula in ♌, quæ in Zod. ſtell. Flamſt. ponitur in ♍ 3° 23′ cum lat. auſtr. 1° 53′.

4^h	49′	26″	♀ in hor.
	57	8	St. in h. auſtralior ♀ 35′ 18″
5	0	2	♀ in hor.
	7	43	St. in h. auſtralior ♀ 35′ 6″
5	10	21	♀ in hor.
	18	2	St. in h. auſtralior ♀ 34′ 58″
5	19	50	♀ in hor.
	27	28	St. in h. auſtralior ♀ 35′ 3″
5	29	53	♀ in hor.
	37	29	St. in h. auſtralior ♀ 34′ 57″
5	43	17	♀ in hor.
	50	52	St. in h. auſtralior ♀ 34′ 51″.

Oct. 16 mane ♀ cum ſtellula, quæ eſt proxima ante ſtellam *c* in ♌.

5^{h}	22′	38″	♀ in hor.
	31	41	St. in h. borealior ♀ 15′ 22″
5	46	51	♀ in hor.
	55	52	St. in h. auſtralior ♀ 15′ 14″.

Oct. 17 mane ♀ comparata cum ſtella *c* ♌ & una cum præcedente ſtellula

5^{h}	1′	43″	♀ in hor.
	7	22	St. præc. in h. auſtr. ♀ 3′ 26″
	12	8	St. *c* in h. auſtralior ♀ 8′ 3″
5	14	45	♀ in hor.
	20	22	St. præc. in h. auſtr. ♀ 3′ 16″
	25	6	St. *c* in h. auſtralior ♀ 7′ 36″
5	28	28	♀ in hor.
	34	5	St. præc. in h. auſtr. ♀ 3′ 10″
	38	49	St. *c* in h. auſtralior ♀ 7′ 30″
5^{h}	41′	44″	♀ in hor.
	47	17	St. præc. in h. auſtr. ♀ 3′ 7″
	52	2	St. *c* in h. auſtralior ♀ 7′ 25″
5	55	51	♀ in hor.
6	1	24	St. præc. in h. auſtr. ♀ 3′ 1″
	6	8	St. *c* in h. auſtralior ♀ 7′ 14″.

Oct. 18 mane

4^{h}	33′	37″	♀ in hor.
	40	38	St. in h. borealior ♀ 4′ 38″
4	42	41	♀ in hor.
	49	39	St. in h. borealior ♀ 4′ 38″
4	51	54	♀ in hor.
	58	51	St. in h. borealior ♀ 4′ 39″
5	1	23	♀ in hor.
	8	18	St. in h. borealior ♀ 4′ 49″
5	11	3	♀ in hor.
	17	55	St. in h. borealior ♀ 4′ 50″.

$5^h\ 20'\ 7''$ ♀ in hor.
27 0 St. in h. borealior ♀ $5'\ 2''$
5 30 32 ♀ in hor.
37 23 St. in h. borealior ♀ $5'\ 4''$
5 41 9 ♀ in hor.
47 59 St. in h. borealior ♀ $5'\ 10''$.

Oct. 30 mane cœpi comparare ♀^{rem} cum ſtella β ♍ arcte conjungendam.
$5^h\ 52'\ 54''$ ♀ in hor.
6 5 23 St. in h. auſtralior ♀ $1^\circ\ 0'\ 10''$
6 8 13 ♀ in hor.
20 41 St. in h. auſtralior ♀ $1^\circ\ 0'\ 10''$.

Oct. 31 mane
$5^h\ 35'\ 55''$ ♀ in hor.
44 33 St. in h. auſtralior ♀ $42'\ 3''$
5 46 41 ♀ in hor.
55 18 St. in h. auſtralior ♀ $41'\ 51''$

$6^h\ 8'\ 26''$ ♀ in hor.
17 1 St. in h. auſtralior ♀ $41'\ 43''$
6 19 6 ♀ in hor.
27 40 St. in h. auſtralior ♀ $41'\ 31''$
6 31 42 ♀ in hor.
40 15 St. in h. auſtralior ♀ $41'\ 14''$.

Nov. 1 mane
$4^h\ 35'\ 10''$ ♀ in hor.
40 8 St. in h. auſtralior ♀ $23'\ 54''$
4 42 16 ♀ in hor.
47 12 St. in h. auſtralior ♀ $23'\ 54''$
4 49 0 ♀ in hor.
53 56 St. in h. auſtralior ♀ $23'\ 41''$
4 55 43 ♀ in hor.
5 0 37 St. in h. auſtralior ♀ $23'\ 53''$
5 2 16 ♀ in hor.
7 10 St. in h. auſtralior ♀ $23'\ 47''$
5 8 31 ♀ in hor.
13 23 St. in h. auſtralior ♀ $23'\ 37''$.

Nov. 2 mane

5^h 10′ 22″ ♀ in hor.
11 23 St. in h. auſtralior ♀ 4′ 19″
5 13 53 ♀ in hor.
14 52 St. in h. auſtralior ♀ 4′ 16″
5 17 24 ♀ in hor.
18 24 St. in h. auſtralior ♀ 4′ 16″
5 31 41 ♀ in hor.
32 38 St. in h. auſtralior ♀ 4′ 3″
6 21 15 ♀ in hor.
22 4 St. in h. auſtralior ♀ 3′ 18″
6 27 33 ♀ in hor.
28 11 St. in h. auſtralior ♀ 3′ 14″.

Nov. 3 mane

5^h 16′ 5″ St. in hor.
19 2 ♀ in h. auſtral. ſtellâ 15′ 6″
5 21 11 St. in hor.
24 6 ♀ in h. auſtral. ſtellâ 15′ 7″
5 26 47 St. in hor.
29 42 ♀ in h. auſtral. ſtellâ 15′ 8″
6^h 9′ 2″ St. in hor.
12 5 ♀ in h. auſtral. ſtellâ 15′ 57″
6 14 54 St. in hor.
17 58 ♀ in h. auſtral. ſtellâ 15′ 57″.

Nov. 8 mane cœpi comparare ♀rem cum ſtella η ♍ in pectore Virginis.

4^h 52′ 4″ ♀ in hor.
58 52 St. in h. auſtralior ♀ 29′ 25″
5 1 19 ♀ in hor.
8 6 St. in h. auſtralior ♀ 29′ 16″
5 10 56 ♀ in hor.
17 42 St. in h. auſtralior ♀ 29′ 10″
5 20 31 ♀ in hor.
27 15 St. in h. auſtralior ♀ 28′ 59″
5 29 23 ♀ in hor.
36 5 St. in h. auſtralior ♀ 28′ 54″.

Nov. 9 mane

5^h 2′ 43″ ♀ in hor.
5 30 St. in h. auſtralior ♀ 7′ 46″.

5^h	10′	18″	♀ in hor.
	13	3	St. in h. auſtralior ♀ 7′ 44″
5	22	4	♀ in hor.
	24	49	St. in h. auſtralior ♀ 7′ 39″
5	27	39	♀ in hor.
	30	22	St. in h. auſtralior ♀ 7′ 31″
5	34	18	♀ in hor.
	36	59	St. in h. auſtralior ♀ 7′ 25″
5	38	19	♀ in hor.
	40	59	St. in h. auſtralior ♀ 7′ 27″
5	44	33	♀ diſt. a ſtella minore vicinæ ſtellæ ν 25′ 43″
5	49	35	♀ diſt. ab ipſa ν 40′ 40″, & diſtantia harum duarum ſtellarum 20′ 11″.

Nov. 10 mane

5^h	9′	58″	St. ν in hor.
	11	14	♀ in h. auſtral. ſtellâ 13′ 30″
5	18	52	St. in hor.
	20	9	♀ in h. auſtral. ſtellâ 13′ 35″
5^h	25′	54″	St. in hor.
	27	16	♀ in h. auſtral. ſtellâ 13′ 53″
5	43	44	St. in hor.
	45	5	♀ in h. auſtral. ſtellâ 14′ 2″
5	53	58	St. in hor.
	55	19	♀ in h. auſtral. ſtellâ 14′ 9″
6	18	22	St. in hor.
	19	49	♀ in h. auſtral ſtellâ 14′ 31″
6	21	40	St. in hor.
	23	7	♀ in h. auſtral. ſtellâ 14′ 35″.

Nov. 11 mane

5^h	32′	36″	St. in hor.
	37	58	♀ in h. auſtral. ſtellâ 35′ 45″
5	49	25	St. in hor.
	54	50	♀ in h. auſtral. ſtellâ 35′ 53″
6	7	32	St. in hor.
	12	58	♀ in h. auſtral. ſtellâ 36′ 27″
6	17	32	St. in hor.
	23	0	♀ in h. auſtral. ſtellâ 36′ 45″.

6ʰ 25′ 46″ St. in hor.
31 16 ♀ in h. auſtral. ſtellâ 36′ 28″
6 33 55 St. in hor.
39 26 ♀ in h. auſtral. ſtellâ 36′ 45″.

Dec. 4 mane ♀ cum ſtella x ♍ in ima ora veſtis Virginis.

5ʰ 34′ 2″ ♀ in hor.
43 57 St. in h. auſtralior ♀ 14′ 22″
5 45 57 ♀ in hor.
55 48 St. in h. auſtralior ♀ 14′ 18″
5 59 27 ♀ in hor.
6 19 15 St. in h. auſtralior ♀ 14′ 4″.

Dec. 5 mane

5ʰ 59′ 56″ ♀ in hor.
6 5 21 St. in h. auſtralior ♀ 9′ 31″
6 7 36 ♀ in hor.
12 59 St. in h. auſtralior ♀ 9′ 27″

6ʰ 14′ 23″ ♀ in hor.
19 46 St. in h. borealior ♀ 9′ 33″.

Dec. 13 mane ♀ cum μ ♎ in lance auſtrina Libræ

6ʰ 44′ 22″ St. h in h. auſtral. ♀ 44′ 32″
6 54 8 ♀ in hor.
59 22 St. in h. auſtralior ♀ 44′ 24″
7 1 51 ♀ in hor.
7 6 St. in h. auſtralior ♀ 44′ 8″.

Dec. 23 mane cum elapſis diebus § obſervaſſem ♀^{rem} cum ♄^{no}, comparata ♀ cum ſtella ζ & duabus vicinis, quæ in Zod. ſtell. Flamſt. ponuntur, inter ♎ & ♏.

5ʰ 23′ 49″ ♀ in hor.
25 41 St. ζ in h. auſtral. ♀ 6′ 47″.

5^h 34′ 32″ ♀ in hor.
36 22 St. in h. auſtralior ♀ 6′ 31″
5 48 13 ♀ in hor.
50 0 St. in h. auſtralior ♀ 6′ 17″
6 3 14 ♀ in hor.
4 58 St. in h. auſtralior ♀ 6′ 12″
6 10 40 ♀ diſt. ab occidentaliore ibi 42′ 8″
6 13 8 ♀ diſt. ab orientaliore, quæ eſt ipſa ζ 25′ 16″
6 14 50 ♀ diſt. a media 11′ 39″.

Dec. 30 mane ♀ cum ſtella ν ♏
6^h 23′ 36″ ♀ in hor.
29 56 St. ν in h. auſtralior ♀ 45′ 9″
6 32 38 ♀ in hor.
38 55 St. in h. auſtralior ♀ 45′ 9″
6 41 20 ♀ in hor.
47 35 St. in h. auſtralior ♀ 45′ 3″
6 52 5 ♀ diſt. a β ♏ 1° 3′ 44″
6 56 23 ♀ in hor.
7 2 33 St. ν in h. auſtralior ♀ 44′ 59″.

Anno 1749.

Jan. 1 mane ♀ cum eadem ν ♏
5^h 45′ 43″ St. in hor.
49 13 ♀ in h. boreal. ſtellâ 12′ 10″
5 56 56 St. in hor.
6 0 27 ♀ in h. boreal. ſtellâ 12′ 12″
6 5 53 St. in hor.
9 26 ♀ in h. boreal. ſtellâ 12′ 7″

6^h 17′ 29″ St. in hor.
21 3 ♀ in h. boreal. ſtellâ 11′ 58″
6 24 40 St. in hor.
28 16 ♀ in h. boreal. ſtellâ 11′ 53″
6 35 13 St. in hor.
38 52 ♀ in h. boreal. ſtellâ vacat.

6^h 42′ 17″ St. in hor.
45 57 ♀ in h. boreal. ſtellà 11′ 41″
6 47 25 St. in hor.
51 6 ♀ in h. boreal. ſtellà 11′ 44″
6 53 48 ♀ diſt. a ν ♏ 55′ 22″.

Jan. 12 mane ♀ comparata cum ſtella ϱ in tibia ſiniſtra Ophiuchi.
6^h 19′ 25″ ♀ in hor.
28 31 St. in h. borealior ♀ 12′ 56″
6 31 29 ♀ in hor.
40 33 St. in h. borealior ♀ 12′ 53″
6 42 37 ♀ in hor.
51 39 St. in h. borealior ♀ 13′ 0″.

Jan. 13 mane ♀ cum eadem
6^h 29′ 57″ ♀ in hor.
33 51 St. in h. borealior ♀ 23′ 2″
6 35 37 ♀ in hor.
39 30 St. in h. borealior ♀ 23′ 3″

6^h 41′ 13″ ♀ in hor.
45 5 St. in h. borealior ♀ 23′ 4″
6 46 51 ♀ in hor.
50 42 St. in h. borealior ♀ 23′ 5″
6 52 34 ♀ in hor.
56 23 St. in h. borealior ♀ 23′ 7″.

Jan. 16 mane ♀ cum ſtella D poſt pedem ſiniſtrum Ophiuchi.
6^h 30′ 43″ ♀ in hor.
41 23 St. in h. borealior ♀ 6′ 43″
6 43 20 ♀ in hor.
53 58 St. in h. borealior ♀ 6′ 47″.

Jan. 17 mane cum eadem
6^h 35′ 34″ ♀ in hor.
41 1 St. in h. borealior ♀ 14′ 22″
6 43 6 ♀ in hor.
48 32 St. in h. borealior ♀ 14′ 27″
6 50 14 ♀ in hor.
55 39 St. in h. borealior ♀ 14′ 27″.

Febr. 1 mane ♀ cum ſtella σ ♐ in tempore dextro Sagittarii.

$6^h\ 30'\ 16''$ ♀ in hor.
$37\ \ 32$ St. in h. borealior ♀ $20'\ 26''$.

Sept. 26 veſpere ♀ cum λ ♍ in pede ſiniſtro Virginis.

$6^h\ 21'\ 28''$ ♀ in hor.
$28\ \ 2$ St. in h. auſtralior ♀ $4'\ 37''$
$6\ \ 31\ \ 24$ ♀ in hor.
$37\ \ 56$ St. in h. auſtralior ♀ $4'\ 37''$
$6\ \ 40\ \ 43$ ♀ in hor.
$47\ \ 16$ St. in h. auſtralior ♀ $4'\ 35''$.

Oct. 2 veſp. ♀ cum α ♎

$5^h\ 51'\ 20''$ ♀ in hor.
$6\ \ 1\ \ 17$ St. in h. auſtralior ♀ $3'\ 57''$.

Non repetii properans ad obſervationem ♄.

Oct. 3 veſp. ♀ cum eadem

$5^h\ 56'\ 54''$ ♀ in hor.
$6\ \ 2\ \ 11$ St. in h. borealior ♀ $16'\ 35''$
$6\ \ 5\ \ 24$ ♀ in hor.
$10\ \ 41$ St. in h. borealior ♀ $16'\ 35''$.

Nov. 15 veſp. ♀ cum λ ♐ in arcu Sagittarii.

$5^h\ 4'\ 54''$ ♀ in hor.
$6\ \ 6$ St. in h. borealior ♀ $2'\ 31''$
$5\ \ 9\ \ 52$ ♀ in hor.
$11\ \ 4$ St. in h. borealior ♀ $2'\ 35''$.
$5\ \ 15\ \ 14$ ♀ in hor.
$16\ \ 24$ St. in h. borealior ♀ $2'\ 29''$
$5\ \ 18\ \ 32$ ♀ in hor.
$19\ \ 41$ St. in h. borealior ♀ $2'\ 33''$
$5\ \ 22\ \ 15$ ♀ in hor.
$23\ \ 23$ St. in h. borealior ♀ $2'\ 32''$.

Nov. 24 veſp. ♀ cum ψ ♐
5^h 20′ 6″ ♀ in hor.
21 19 St. in h. auſtralior ♀
34′ 13″
5 23 0 ♀ in hor.
24 13½ St. in h. auſtralior ♀
34′ 13″
5 27 40 ♀ in hor.
28 53 St. in h. auſtralior ♀
34′ 13″.

Nov. 25 veſp. ♀ cum χ ♐
5^h 7′ 30″ ♀ in hor.
13 43 St. in h. borealior ♀
0′ 11″
5 16 51 ♀ in hor.
22 42 St. in h. borealior ♀
0′ 11″
5 25 15 ♀ in hor.
31 4 St. in h. borealior ♀
0′ 11″.

Nov. 26 veſp. ♀ cum eadem
5^h 9′ 31″ ♀ in hor.
10 11½ St. in h. auſtralior ♀
7′ 7″
5^h 19′ 5″ ♀ in hor.
43½ St. in h. auſtralior ♀
7′ 7″
5 31 16 ♀ in hor.
52 St. in h. auſtralior ♀
7′ 7″.

Dec. 19 veſpere ♀ cum quadam ſtella, quæ in Zod. ſtell. Flamſt. ponitur in ♒ 12° 0′ cum lat. auſtr. 2° 7′.
5^h 54′ 46″ ♀ in hor.
55 44 St. in h. auſtralior ♀
1′ 58″
5 59 50 ♀ in hor.
6 0 48 St. in h. auſtralior ♀
2′ 0″.

Dec. 20 veſp. ♀ cum ι ♑
5^h 27′ 0″ ♀ diſt a ſtella
46′ 27″
5 30 53 ♀ in hor.
31 44 St. in h. borealior ♀
44′ 24″.

Dec. 29

Dec. 29 veſp. ♀ cum ι ♒

$6^h\ 41'\ 41''$ ♀ in hor.

47 6 St. in h. auſtralior ♀ $3'\ 0''$

6 48 47 ♀ in hor.

54 11 St. in h. auſtralior ♀ $3'\ 0''$

6 56 10 ♀ in hor.

7 1 33 St. in h. auſtralior ♀ $3'\ 0''$.

Dec. 30 veſp. ♀ cum eadem

$6^h\ 5'\ 13''$ ♀ in hor.

6 28 St. in h. auſtralior ♀ $28'\ 3''$

6 12 2 ♀ in hor.

13 15 St. in h. auſtralior ♀ $28'\ 4''$

6 15 31 ♀ diſt. a ſtella $33'\ 29''$.

Anno 1750.

Jan. 4 veſpere cœpi comparare ♀[rem] cum σ ♒ in coxendice ſiniſtra Aquarii.

$5^h\ 14'\ 18''$ ♀ in hor.

19 24 St. in h. borealior ♀ $29'\ 33''$

5 24 8 ♀ in hor.

29 13 St. in h. borealior ♀ $27'\ 21''$

5 42 29 ♀ in hor.

47 32 St. in h. borealior ♀ $26'\ 56''$.

Jan. 5 veſpere

$5^h\ 20'\ 28''$ ♀ in hor.

21 30 St. σ in h. decurritque ea idem parallelum fixum, quoad ♀ non quidem biſſecta omnino ſed ita, ut promicaret paululum infra filum, unde cenſeri poteſt paulo borealior ♀[re].

5h 35′ 17″ ♀ in hor.
36 16 St. in h. decurritque filum parallelum fixum ita, ut tantundem promicaret ſupra filum, quantum ante infra filum, cenſerique poteſt paullo auſtralior, & tempore intermedio fuiſſe in eadem declinatione cum ♀re.
5 39 24 ♀ diſtat a ſtella 14′ 17″.

Jan. 10 veſp. ♀ cum λ ♒
5h 25′ 38″ ♀ in hor.
29 1 St. in h. borealior ♀ 43′ 3″
5 31 14 ♀ in hor.
34 35 St. in h. borealior ♀ 43′ 1″
5 36 33 ♀ in hor.
39 55 St. in h. borealior ♀ 42′ 40″
5 46 5 ♀ diſtat a ſtella 1° 4′ 13″.
Sed dub. aliquantum.

Jan. 12 veſp. ♀ cum eadem
5h 40′ 47″ St. in hor.
45 8 ♀ in h. boreal. ſtellà 13′ 57″
5 47 8 St. in hor.
51 30 ♀ in h. boreal. ſtellà 13′ 58″
5 53 3 St. in hor.
57 26 ♀ in h. boreal. ſtellà 12′ 28″ d.
5 59 44 St. in hor.
6 4 8 ♀ in h. boreal. ſtellà 14′ 27″.

Jan. 15 veſp. ♀ cum φ ♒
5h 34′ 29″ ♀ in hor.
40 40 St. in h. auſtralior ♀ 9′ 38″
5 41 57 ♀ in hor.
48 7 St. in h. auſtralior ♀ 9′ 42″
5 49 15 ♀ in hor.
55 25 St. in h. auſtralior ♀ 9′ 54″.

Jan. 16 veſp. ♀ cum eadem
6h 15′ 16″ ♀ in hor.
17 41 St. in h. auſtralior ♀ 39′ 23″.

Jul. 9 mane ♀ cum ε ♉
3^h 57′ 18″ ♀ in hor.
4 5 6 St. in h. borealior ♀ 21′ 40″
4 8 1 ♀ in hor.
15 47 St. in h. borealior ♀ 21′ 36″
4 12 46 ♀ in hor.
25 29 St. in h. borealior ♀ 21′ 30″.

Jul. 10 mane ♀ cum eadem
3^h 37′ 19″ ♀ in hor.
40 41½ St. in h. borealior ♀ 7′ 56″
3 47 41 ♀ in hor.
51 0½ St. in h. borealior ♀ 7′ 56″.

Jul. 28 mane ♀ cum ζ ♉
4^h 3′ 40″ St. in hor.
16 28 ♀ in h. boreal. ſtellâ 31′ 33″
4 20 56 St. in hor.
33 49 ♀ in h. boreal. ſtellâ 31′ 39″.

Aug. 13 mane ♀ cum δ ♊
4^h 26′ 28″ ♀ in hor.
36 27 St. in h. borealior ♀ 33′ 52″
4 39 3 ♀ in hor.
49 1 St. in h. borealior ♀ 33′ 52″.

Sept. 1 mañe ♀ cum δ ♋
4^h 34′ 0″ Orientalior ſtella 0′ 3″ penduli, & auſtralior 2′ 5″ circuli.

Sept. 17 mane cœpi comparare ♀^{rem} cum Regulo α ♌.
5^h 14′ 13″ ♀ in hor.
20 40 St. in h. auſtralior ♀ 55′ 11″
5 22 16 ♀ in hor.
28 40 St. in ħ. auſtralior ♀ 55′ 8″
5 30 47 ♀ in hor.
37 8 St. in h. auſtralior ♀ 55′ 7″
5 39 11 ♀ in hor.
45 28 St. in h. auſtralior ♀ 55′ 3″.

Sept. 18 mane

5ʰ	8′	7″	♀ in hor.
	9	47	St. in h. auſtralior ♀ 33′ 7″
5	14	0	♀ in hor.
	15	40	St. in h. auſtralior ♀ 32′ 57″
5	18	13	♀ in hor.
	19	52	St. in h. auſtralior ♀ 32′ 57″
5	22	12	♀ in hor.
	23	49	St. in h. auſtralior ♀ 32′ 57″
5	25	44	♀ in hor.
	27	21	St. in h. auſtralior ♀ 32′ 47″
5	29	53	♀ in hor.
	31	29	St. in h. auſtralior ♀ 32′ 47″
5	33	32	♀ in hor.
	35	7	St. in h. auſtralior ♀ 32′ 47″
5	37	19	♀ in hor.
	38	54	St. in h. auſtralior ♀ vacat.
5	41	16	♀ in hor.
	42	49	St. in h. auſtralior ♀ 32′ 42″
5	45	8	♀ in hor.
	46	41	St. in h. auſtralior ♀ 32′ 36″
5	49	1	♀ in hor.
	50	34	St. in h. auſtralior ♀ 32′ 21″
5	53	6	♀ in hor.
	54	38	St. in h. auſtralior ♀ 32′ 23″
5	56	6½	♀ in hor.
	57	37½	St. in h. auſtralior ♀ 32′ 21″
5	59	19	♀ in hor.
6	0	51	St. in h. auſtralior ♀ 32′ 13″
6	2	22	♀ in hor.
	3	51	St. in h. auſtralior ♀ 32′ 17″
6	8	20	♀ in hor.
	9	50	St. in h. auſtralior ♀ vacat.

Sept. 19 mane

5ʰ	24′	19″	St. α ♌ in hor.
	27	27	♀ in h. boreal. ſtellâ 10′ 0″
5	41	5	St. in hor.
	44	16	♀ in h. boreal. ſtellâ 9′ 40″
5	48	56	St. in hor.
	52	8	♀ in h. boreal. ſtellâ 9′ 36″.

Sept. 24 mane
$3^h\ 22'\ 0''$ ♀ diſt. a ſtella ρ ♌ ad ortum boreum $56'\ 40''$, nec plus per nubes licuit.

Oct. 3 mane ♀ cum σ ♌
$5^h\ 43'\ 19''$ ♀ in hor.
47 47 St. in h. auſtralior ♀ $3'\ 32''$
5 49 41 ♀ in hor.
54 8 St. in h. auſtralior ♀ $3'\ 32''$.

Oct. 4 mane ♀ cum eadem
$5^h\ 45'\ 31''$ St. σ in hor.
39½ ♀ in h. auſtral. ſtellâ $24'\ 9''$.
Obſervatio unica ſed tuta.

Oct. 16 mane ♀ cum η ♍
$5^h\ 45'\ 5''$ ♀ in hor.
48 52 St. in h. auſtralior ♀ $34'\ 42''$.

Anno 1751.

April. 26 veſpere ♀ cum ſtella A ♉
$7^h\ 29'\ 13''$ St. in hor.
32 19 ♀ in h. auſtral. ſtellâ $28'\ 54''$
7 34 3 St. in hor.
37 10 ♀ in h. auſtral. ſtellâ $28'\ 51''$
7 38 51 St. in hor.
41 57 ♀ in h. auſtral. ſtellâ $28'\ 57''$.

Maji 1 veſp. comparata ♀ cum ſtel. υ & τ ſupra oculum ſiniſtrum Tauri.
$7^h\ 43'\ 47''$ St. υ in hor.
51 0 ♀ in h. boreal. ſtellâ υ $2'\ 59''$
59 38 St. τ in h. bor. ſtellâ υ $13'\ 53''$
8 3 21 ♀ in hor.
11 58 St. τ in h. boreal. ♀ $10'\ 42''$.

Maji 2 veſpere

$7^h\ 42'\ 9''$ ♀ in hor.
45 41 St. in h. auſtralior ♀ $3'\ 45''$
7 37 34 ♀ in hor.
51 7 St. τ in h. auſtral. ♀ $3'\ 47''$ d.
8 0 49 ♀ in hor.
4 18 St. τ in h. auſtral. ♀ $4'\ 4''$.

Maji 14 veſp. comparata ♀ cum ſtella maxime auſtrali in Rhomboide, quæ eſt inter ♉ & ♊, poniturque in Zod. ſtell. Flamſt. in ♊ 23° 12′ cum lat. bor. 1° 7′.

$7^h\ 56'\ 42''$ ♀ in hor.
8 3 56 St. in h. auſtralior ♀ $8'\ 53''$
8 9 22 ♀ in hor.
16 34 St. in h. auſtralior ♀ $9'\ 8''$.

Maji 15 veſp. ♀ cum eadem

$7^h\ 55'\ 28''$ ♀ in hor.
57 27 St. in h. auſtralior ♀ $14'\ 58''$
7 59 33 ♀ in hor.
8 1 31 St. in h. auſtralior ♀ $14'\ 45''$.

Maji 20 veſp. cœpi comparare ♀^rem cum ſtella ε ♊ in genu dextro Caſtoris.

$7^h\ 24'\ 45''$ ♀ in hor.
55 11½ St. in h. borealior ♀ $19'\ 38''$
7 57 14 ♀ in hor.
8 27 33 St. in h. borealior ♀ $19'\ 32''$.

Maji 21 veſpere

$7^h\ 19'\ 7''$ ♀ in hor.
44 18 St. in h. borealior ♀ $17'\ 42''$
7 45 40 ♀ in hor.
8 10 46 St. in h. borealior ♀ $17'\ 50''$.

$8^h\ 13'\ 42''$ ♀ in hor.
38 41 St. in h. borealior ♀
17′ 46″.

Maji 23 veſpere
$7^h\ 22'\ 18''$ ♀ in hor.
36 57 St. in h. borealior ♀
16′ 33″
7 38 54 ♀ in hor.
53 29 St. in h. borealior ♀
16′ 24″
7 55 48 ♀ in hor.
8 10 19 St. in h. borealior ♀
16′ 41″d.
8 12 42 ♀ in hor.
27 9 St. in h. borealior ♀
16′ 28″.

Maji 24 veſpere
$7^h\ 23'\ 15''$ ♀ in hor.
32 38 St. in h. borealior ♀
17′ 0″
7 35 37 ♀ in hor.
44 56 St. in h. borealior ♀
16′ 44″
7 46 52 ♀ in hor.
56 8 St. in h. borealior ♀
16′ 58″

$7^h\ 57'\ 23''$ ♀ in hor.
8 6 38 St. in h. borealior ♀
16′ 55″
8 7 42 ♀ in hor.
16 54 St. in h. borealior ♀
16′ 55″
8 18 32 ♀ in hor.
27 42 St. in h. borealior ♀
16′ 53″.

Jun. 17 veſp. ♀ cum γ ♋
$8^h\ 14'\ 41''$ ♀ in hor.
21 15½ St. in h. borealior ♀
52′ 15″
8 26 57 ♀ in hor.
33 31 St. in h. borealior ♀
52′ 15″.

Aug. 26 veſp. ♀ cum ſpica α ♍
$6^h\ 45'\ 54''$ ♀ in hor.
52 30 St. in h. auſtralior ♀
21′ 1″
6 54 10 ♀ in hor.
7 0 46 St. in h. auſtralior ♀
20′ 42″
7 2 40 ♀ in hor.
9 15 St. in h. auſtralior ♀
20′ 30″.

7^h 19′ 40″ ♀ in hor.
26 14 St. in h. borealior ♀ 20′ 13″.

Aug. 27 veſp. ♀ cum ead. α ♍
6^h 48′ 25″ ♀ in hor.
51 42½ St. α in h. boreal. ♀ 6′ 40″
6 53 28 ♀ in hor.
56 44½ St. in h. borealior ♀ 6′ 35″
6 58 57 ♀ in hor.
7 2 13 St. in h. borealior ♀ 6′ 51″
7 6 0 ♀ in hor.
9 16 St. in h. borealior ♀ 6′ 51″.

Nov. 20 mane cœpi comparare ♀^rem cum ſtella λ ♍ in pede ſiniſtro Virginis.
6^h 13′ 6″ ♀ in hor.
26 23 St. in h. borealior ♀ 10′ 54″
6 28 2 ♀ in hor.
41 20 St. in h. borealior ♀ 10′ 59″.

Nov. 21 mane
5^h 26′ 12″ ♀ in hor.
39 22 St. in h. auſtralior ♀ 2′ 26″
5 44 23 ♀ in hor.
57 34 St. in h. auſtralior ♀ 2′ 27″.

Nov. 11 mane
5^h 54′ 36″ ♀ in hor.
6 7 31 St. in h. auſtralior ♀ 15′ 4″
6 9 54 ♀ in hor.
22 48 St. in h. auſtralior ♀ 15′ 15″
6 24 30 ♀ in hor.
37 23 St. in h. auſtralior ♀ 15′ 26″.

Nov. 23 mane
5^h 46′ 18″ ♀ in hor.
58 46 St. in h. auſtralior ♀ 26′ 41″
6 1 27 ♀ in hor.
13 55 St. in h. auſtralior ♀ 26′ 47″.

6^h

$6^{h}\ 15'\ 58''$ ♀ in hor.
28 26 St. in h. auſtralior ♀ $26'\ 51''$
6 30 23 ♀ in hor.
42 51 St. in h. auſtralior ♀ $26'\ 51''$.

Nov. 24 nubilus.

Nov. 25 mane
$5^{h}\ 29'\ 1''$ ♀ in hor.
40 12 St. in h. auſtralior ♀ $45'\ 56''$
5 56 3 ♀ in hor.
4 7 13 St. in h. auſtralior ♀ $46'\ 15''$
6 25 13 ♀ in hor.
36 22 St. in h. auſtralior ♀ $46'\ 25''$.

Dec. 29 mane ♀ cum γ ♎
$6^{h}\ 10'\ 37''$ ♀ in hor.
14 44 St. in h. borealior ♀ $34'\ 33''$
6 18 53 ♀ in hor.
23 0 St. in h. borealior ♀ $34'\ 40''$
6 25 58 ♀ in hor.
30 4 St. in h. borealior ♀ $34'\ 42''$.

Dec. 30 mane ♀ cum eadem
$6^{h}.\ 4'\ 20''$ ♀ in hor.
52 St. in h. borealior ♀ $47'\ 28''$.
Obſervatio tuta.

Anno 1752.

Jan. 12 mane ♀ cum ſtella *x* in tibia dextra Ophiuchi.
$5^{h}\ 35'\ 55''$ ♀ in horario.
36 22 St. in hor. auſtralior ♀ $19'\ 27''$.
Obſervatio tuta.

§. V.

MERCURIUS CUM FIXIS.

Anno 1746.

Dec. 10 veſp. comparatus ☿ cum ſtella ψ ♐ inter ſcapulas Sagittarii.

5^h 27′ 47″ ☿ in horario.

53 42 St. in hor. auſtralior ☿ 13′ 39″.

Obſervatio nonnihil dubia ob vapores horizontis, neque repeti potuit, quia ☿ occidit poſt mœnia.

Anno 1747.

Jan. 16 mane cœpi comparare ☿^{rium} cum ſtella ξ ♐ in fronte Sagittarii.

6^h 4′ 53″ ☿ in hor.

35 41 St. in h. auſtralior ☿ 23′ 47″.

Ante autem ſcilicet

6 0 0 Capta diſtantia ☿^{rii} a ſtella quadam vicina 28′ 29″.

Jan. 19 mane

5^h 58′ 18½″ ☿ in hor.

6 21 31 St. ξ in h. boreal. ☿ 2′ 22″.

Jan. 23 mane

5^h 50′ 48″ ☿ in hor.

59 26 St. ξ in h. boreal. ☿ 32′ 44″

6 3 5 ☿ in hor.

11 38 St. in h. borealior ☿ 33′ 3″

6 18 50 ☿ in hor.

27 19 St. in h. borealior ☿ 33′ 31″.

Jan. 24 mane

$5^h\ 46'\ 50''$ ☿ in hor.
51 15 St. in h. borealior ☿ $38'\ 57''$
5 56 52 ☿ in hor.
6 1 12 St. in h. borealior ☿ $39'\ 23''$
6 7 3 ☿ in hor.
11 21 St. in h. borealior ☿ $39'\ 33''$
6 14 44 ☿ in hor.
18 58 St. in h. borealior ☿ $39'\ 50''$
6 23 6 ☿ in hor.
27 15 St. in h. borealior ☿ $39'\ 59''$
6 30 16 ☿ in hor.
34 26 St. in h. borealior ☿ $40'\ 3''$.
Obſervatio dubia.

Jan. 25 mane

$5^h\ 55'\ 7''$ ☿ in hor.
18 St. in h. borealior ☿ $44'\ 48''$
Operatio tuta ex pluribus.
5 57 18 ☿ diſtat a ſtella ξ $45'\ 1''$.

Jan. 26 mane

$6^h\ 4'\ 48''$ St. ξ ♐ in hor.
9 54 ☿ in h. auſtral. ſtellâ $49'\ 49''$
6 13 33 St. ξ in hor.
18 37 ☿ in h. auſtral. ſtellâ $49'\ 49''$.

Anno 1748.

Sept. 6 mane, cum ante duos dies ☿ comparatus fuiſſet cum ♂, ut videre eſt ſuo loco, comparatus eſt hodie cum Regulo α ♌.

$4^h\ 51'\ 5\frac{1}{2}''$ St. in hor.
58 40 ☿ in h. boreal. ſtellâ $11'\ 36''$

$5^h\ 2'\ 9''$ St. in hor.
9 47 ☿ in h. boreal. ſtellâ $11'\ 27''$.

5^h 13′ 45″ St. in hor.
21 30 ☿ in h. boreal. ſtellâ
11′ 18″.

Sept. 7 mane
5^h 7′ 6″ St. α ♌ in hor.
21 18½ ☿ in h. boreal. ſtellâ
16′ 3″.
Obſervatio tuta.

Dec. 16 mane ☿ cum ſtella *x* in tibia dextra Ophiuchi.
6^h 37′ 5″ ☿ in hor.
42 52 St. in h. borealior ☿
31′ 25″.

Anno 1749.

Cum initio Decembris comparaſſem ☿rium cum ♄no, ut ſuo loco videre eſt.

Dec. 10 mane comparatus ☿ cum ſtella β ♏

6^h 12′ 21″ ☿ in hor.
13 15 St. in h. auſtralior ☿
27′ 59″
6 14 40 ☿ in hor.
15 32 St. in h. auſtralior ☿
27′ 59″
6 22 20 ☿ in hor.
23 10 St. in h. auſtralior ☿
27′ 57″
6 24 4 ☿ in hor.
24 52 St. in h. auſtralior ☿
27′ 57″
6 25 43 ☿ diſt. a ſtella β
30′ 17″.

Dec. 11 mane
6^h 3′ 56″ St. β in hor.
8 53 ☿ in h. boreal. ſtellâ
3′ 50″
6 11 46 St. β in hor.
16 26 ☿ in h. boreal. ſtellâ
3′ 31″
6 18 0 St. β in hor.
22 42 ☿ in h. boreal. ſtellâ
3′ 32″
6 25 30 St. β in hor.
30 13½ ☿ in h. boreal. ſtellâ
3′ 22″.

Anno 1750.

Cum initio Novembris comparaſſem ☿rium cum ♀re, ut videre eſt ſuo loco.

Nov. 10 mane comparatus ☿ cum ſtella ϰ ♍ in ima ora veſtis Virginis.

5h 49′ 44″ ☿ in hor.
57 6 St. in h. borealior ☿ 3′ 50″
5 59 6 ☿ in hor.
6 6 28 St. in h. borealior ☿ 3′ 53″
6 8 11 ☿ in hor.
15 33 St. in h. borealior ☿ 3′ 50″
6 17 18 ☿ in hor.
24 39 St. in h. borealior ☿ 3′ 45″
6 26 58 ☿ in hor.
34 20 St. in h. borealior ☿ 3′ 53″.

Nov. 11 mane ☿ cum eadem

5h 53′ 15″ ☿ in hor.
58 37 St. in h. borealior ☿ 10′ 31″
6 1 53 ☿ in hor.
7 15 St. in h. borealior ☿ 10′ 31″
6h 11′ 10″ ☿ in hor.
16 31 St. in h. borealior ☿ 10′ 34″.

Nov. 12 mane ☿ cum eadem

5h 54′ 13″ ☿ in hor.
57 5 St. β in h. boreal. ☿ 21′ 24″
5 59 10 ☿ in hor.
6 2 3 St. in h. borealior ☿ 21′ 37″
6 5 20 ☿ in hor.
8 11 St. in h. borealior ☿ 21′ 40″
6 10 43 ☿ in hor.
13 33 St. in h. borealior ☿ 21′ 42″.
6 15 33½ ☿ in hor.
18 24 St. in h. borealior ☿ 21′ 50″
6 20 13 ☿ in hor.
23 2 St. in h. borealior ☿ 21′ 54″.

6^h	24′	37″	☿ in hor.
	27	26	St. in h. borealior ☿ 21′ 50″
6	28	33	☿ in hor.
	31	21	St. in h. borealior ☿ 21′ 56″.

Nov. 13 mane ☿ cum eadem

5^h	48′	46″	St. x ♍ in hor.
		48½	☿ in h. auſtral. ſtellâ 35′ 56″
5	52	57	St. in hor.
	53	0	☿ in h. auſtral. ſtellâ 36′ 22″
5	57	10	St. in hor.
		14	☿ in h. auſtral. ſtellâ 36′ 20″
6	1	28	St. in hor.
		33	☿ in h. auſtral. ſtellâ 36′ 31″

6^h	7′	20″	St. in hor.
		26	☿ in h. auſtral. ſtellâ 36′ 41″
6	13	38	St. in hor.
		46	☿ in h. auſtral. ſtellâ 36′ 43″
6	19	26	St. in hor.
		35	☿ in h. auſtral. ſtellâ 36′ 50″
6	26	51½	St. in hor.
	27	1	☿ in h. auſtral. ſtellâ 36′ 50″
6	29	52	St. in hor.
	30	2	☿ in h. auſtral. ſtellâ 36′ 56″
6	32	53	St. in hor.
	33	4	☿ in h. auſtral. ſtellâ 36′ 56″
6	35	54	St. in hor.
	36	5	☿ in h. auſtral. ſtellâ 37′ 4″.

CAPUT V.

IMMERSIONES ET EMERSIONES SATELLITUM JOVIS.

Anno 1748.

Aug.	14	veſp.	9^h	32'	50''	Emerſ.	1^{mi}	teleſc.	13 ped.	Obſ. bona.
—	21	—	11	27	9	—	1	—	13	— bona.

Sept.	1	veſp.	11^h	18'	47''	Emerſ.	2^{di}	teleſc.	11 ped.	Obſ. bona.
—	6	—	9	50	52	—	1	—	11	— bona.
—	8	mane	1	20	30	—	3	—	13	— bona.
—	13	veſp.	11	47	28	—	1	—	13	— bona.
—	22	—	8	14	33	—	1	—	12	— bona.
—	26	—	8	36	17	—	2	—	12	— bona.

Oct.	6	mane	0^h	11'	32''	Emerſ.	1^{mi}	teleſc.	14 ped.	Obſ. dubia.
—	13	veſp.	6	3	20	Immerſ.	3	—	13	— bona.
—	—	—	9	37	16	Emerſ.	3	—	13	— ſubdubia.
—	21	—	5	51	55	—	2	—	11	— bona.
—	31	—	6	54	42	—	1	—	12	— bona.

Emerſit autem 1^{mus} tam contiguus alteri Satelliti, ut ab eo non diſcerneretur, niſi ex eo, quod cum illo derepente corpus oblongum efficeret, dum demum poſtea ſepararentur.

Nov. 7 veſp. $8^{h}\ 49'\ 22''$ Emerſ. 1^{mi} teleſc. 12 ped. Obſ. bona.
— 9 — 5 30 o Circiter faciebat ♃ cum ſuis Satellitibus figuram hanc $*^{3}$ o$*^{1}$ $*^{4}$, eratque prope meridianum; poſtea, cum operiremur Immerſionem 4^{ti} Satellitis, quæ debebat fieri.
— — — 6 45 o Accedebat 4^{tus} ad 1^{mum} ita, ut
— — — 7 3 o ambo quaſi unum corpus efficerent, nec jam inter ſe diſcernerentur.
— — — 7 12 o 1^{mus} texit 4^{tum} ita, ut ambo unum punctum efficerent minus etiam quam 3^{tius} Satelles, qui ex altera parte ♃^{vis} ſtabat, quando præciſe ſeparati ſint, obſervatum non eſt, circa h. 8^{vam} diſtabant, ut in hac figura $*^{3}$ o $*^{4}$ $*^{1}$, neque uſque ad 9^{h} immerſus eſt 4^{tus}.

Nov. 26 veſp. $5^{h}\ 52'\ 34''$ Emerſio 4^{ti} teleſcopio, non ſcio quo. Obſ. bona.

Anno 1749.

Jan. 1 veſp. $5^{h}\ 32'\ 43''$ Emerſ. 1^{mi} teleſc. 13 ped. Obſ. bona.

Aug. 17 veſp. $10^{h}\ 45'\ 32''$ Immerſ. 3^{tii} teleſc. 13 ped. Obſ. bona.
10 46 32 — 1 — 13 — bona.
Atqui ex calculo debebat immergi 1^{mus} ante 3^{tium} 10 minutis.

Aug. 25

Aug.	25	mane	0^h	42′	26″	Immerſ.	1	teleſc.	13 ped.	Obſ. bona.
—	—	—	2	48	49	—	3	—	13	— bona.
—	31	—	2	39	45	—	1	—	13	— bona.
Sept.	17	mane	3^h	15′	24″	Emerſ.	1	teleſc.	13 ped.	Obſ. bona.
—	20	veſp.	8	2	21	—	2	—	13	— bona.
—	23	—	10	1	2	—	3	—	13	— bona.
—	25	—	11	39	54	—	1	—	13	— bona.
Oct.	3	mane	1^h	36′	40″	Emerſ.	1	teleſc.	13 ped.	Obſ. bona.
—	9	—	3	33	22	—	1	—	13	— dubia.
						Propter viciniam horizontis.				
—	11	veſp.	10	2	24	—	1	—	13	— bona.
—	18	—	11	59	0	—	1	—	13	— bona.
—	20	—	6	28	5	—	1	—	13	— bona.
—	22	—	7	59	8	—	2	—	13	— bona.
—	26	mane	1	55	16	—	1	—	13	— bona.
Nov.	3	veſp.	10^h	19′	45″	Emerſ.	1	teleſc.	13 ped.	Obſ. bona.
—	4	—	7	25	1	—	3	—	13	— bona.
—	12	—	6	43	20	—	1	—	13	— bona.
Dec.	5	veſp.	6^h	52′	35″	Emerſ.	1	teleſc.	13 ped.	Obſ. bona.
—	10	—	6	15	37	—	3	—	13	— bona.
—	18	—	4	47	22	—	2	—	13	— bona.
—	25	—	7	19	48	—	2	—	13	— bona.
—	28	—	6	58	29	—	1	—	13	— bona.

Anno 1750.

Jul.	29	mane	2^{h}	$12'$	$59''$	Emerſ.	1	teleſc.	13 ped.	Obſ. bona.

Sept.	4	mane	1^{h}	$9'$	$51''$	Emerſ.	2	teleſc.	13 ped.	Obſ. bona.
—	11	—	3	48	36	—	2	—	13	— bona.
—	21	veſp.	11	8	7	—	1	—	13	— bona.
—	28	—	10	29	9	—	2	—	13	— bona.
—	29	mane	1	5	21	Cum acceſſiſſem ad obſervandam Immerſionem 1^{mi} nullum jam veſtigium.				

Oct.	6	mane	1^{h}	$10'$	$21''$	Immerſ.	2	teleſc.	13 ped.	Obſ. bona.
—	—	—	3	1	26	—	1	—	13	— bona.
—	13	—	3	48	50	—	2	—	13	— ſubdubia.
—	—	—	4	54	24	Acceſſi ad Obſerv. Immerſ. 1^{mi} & nullum jam illius veſtigium.				
—	14	veſp.	8	58	4	Immerſ.	3	teleſc.	13 ped.	Obſ. bona.
—	—	—	11	25	57	—	1	—	13	— bona.
—	22	mane	1	2	37	—	3	—	13	— bona.
—	—	—	1	22	37	—	1	—	13	— dubia.
—	23	veſp.	7	47	25	—	2	—	13	— dubia.
—	—	—	7	49	45	—	1	—	13	— dubia.
—	30	—	11	54	24	Emerſ.	1	—	13	— ſat. bona.
—	31	mane	1	5	9	Acceſſi ad Obſ. Emerſ. 2^{di}, ſed is pleno jam lumine fulgebat.				

Nov.	7	mane	1^{h}	$48'$	$35''$	Emerſ.	1	teleſc.	13 ped.	Obſ. bona.
—	—	—	3	33	7	Acceſſi ad Obſ. Emerſ. 2^{di}, ſed jam emerſerat.				

Nov.	8	veſp.	8^h	17′	13″	Emerſ.	1	teleſc.	13	ped. Obſ.	bona.
—	17	—	7	18	44	—	2	—	13	—	bona.
—	19	—	7	1	33	Acceſſi ad Obſ. Emerſ. 3^{tii}, ſed is jam emerſerat.					
—	23	mane	0	4	27	Emerſ.	1	teleſc.	13	ped. Obſ.	bona.
—	24	veſp.	6	33	17	—	1	—	13	—	bona.
—	24	—	9	56	4	—	2	—	13	—	bona.
—	26	—	10	51	7	—	3	—	11	—	bona.
Dec.	8	veſp.	10^h	18′	23″	Emerſ.	1	teleſc.	13	ped. Obſ.	bona.
—	19	—	6	59	50	—	2	—	13	—	bona.

Anno 1751.

Jan.	1	veſp.	6^h	42′	55″	Emerſ.	3	teleſc.	11	ped. Obſ.	bona.
—	20	—	6	38	7	—	2	—	13	—	bona.
—	27	—	9	14	53	—	2	—	13	—	bona.
Febr.	1	veſp.	6^h	51′	44″	Emerſ.	1	teleſc.	13	ped. Obſ.	bona.
—	8	—	8	47	35	—	1	—	13	—	bona.
—	13	—	6	42	33	—	3	—	13	—	bona.
Sept.	9	mane	4^h	21′	38″	Immerſ.	1	teleſc.	13	ped. Obſ.	bona.
—	18	—	0	46	48	—	1	—	13	—	bona.
—	23	veſp.	11	40	58	Emerſ.	3	—	13	—	bona.
—	25	mane	2	43	15	Immerſ.	1	—	13	—	bona.
—	30	—	0	42	28	—	3	—	13	—	bona.

Oct.	1	mane	1^h	$58'$	$44''$	Immerſ.	3	teleſc.	13	ped.	Obſ. bona.
—	—	—	3	42	19	Emerſ.	3	—	13	—	bona.
—	—	—	3	51	44	Viſus luce & magnitudine ſuppar aliis.					
—	—	—	3	56	6	Solito demum ac pleno lumine fulſit.					
—	3	veſp.	11	7	58	Immerſ.	1	teleſc.	13	ped.	Obſ. bona.
—	14	mane	5	58	20	—	2	—	13	—	bona.
—	18	—	2	59	49	—	1	—	13	—	bona.
—	19	veſp.	9	29	2	—	1	—	13	—	bona.
—	24	—	9	54	1	—	2	—	13	—	bona.
—	25	mane	4	54	24	—	1	—	13	—	bona.
—	26	veſp.	11	23	20	—	1	—	13	—	bona.

Nov.	3	mane	1^h	$17'$	$51''$	Immerſ.	1	teleſc.	13	ped.	Obſ. bona.
—	5	veſp.	10	2	36	—	3	—	13	—	bona.
—	10	mane	3	10	48	—	1	—	13		ſat. bona.
—	13	—	2	0	50	—	3	—	13		ſat. bona.
—	16	—	5	43	59	—	2	—	13	—	bona.
—	18	veſp.	7	1	20	—	2	—	13	—	bona.
—	20	mane	5	58	5	—	3	—	15	—	bona.
—	26	—	1	23	47	—	1	—	13	—	bona.

Dec.	4	veſp.	11^h	$53'$	$11''$	Emerſ.	1	teleſc.	13	ped.	Obſ. bona.
—	12	mane	1	44	15	—	1	—	13	—	bona.
—	13	veſp.	8	12	8	—	1	—	14	—	bona.
—	18	—	11	45	7	—	3	—	13	—	bona.
—	19	mane	3	35	34	—	1	—	13	—	bona.
—	20	veſp.	9	8	7	—	2	—	13	—	bona.
—	—	—	10	2	57	—	1	—	13	—	bona.

Dec.	27	veſp.	11h	41′	44″	Emerſ.	2	teleſc.	13	ped. Obſ.	bona.
—	—	—	11	54	37	—	1	—	13	—	bona.
—	29	—	6	22	18	—	1	—	13	—	bona.
—	—	—	6	22	12	Obſervavit ſocius tubo 14 pedum & fortaſſe tutius.					

Anno 1752.

Jan.	4	mane	1h	45′	34″	Emerſ.	1	teleſc.	13	ped. Obſ.	bona.
—	—	—	2	17	23	—	2	—	13	—	dubia.
						Quia 2dus prodiit tam contiguus 1mo, ut initio non diſcernerentur.					
—	5	veſp.	8	13	37	Emerſ.	1	teleſc.	13	ped. Obſ.	bona.
—	14	—	6	11	21	—	2	—	18	—	bona.
—	19	—	11	58	42	—	1	—	13	—	bona.
—	21	—	6	26	45	—	1	—	13	—	bona.
—	—	—	8	47	38	—	2	—	13	—	bona.
—	23	—	5	34	14	Immerſ.	3	—	13	—	bona.
—	—	—	7	37	1	Emerſ.	3	—	13	—	bona.
—	28	—	8	20	18	—	1	—	13	—	bona.
—	30	—	9	34	16	Immerſ.	3	—	13	non ſat.	tuta.
—	—	—	11	37	11	Emerſ.	3	—	13	—	tuta.

Febr.	22	veſp.	8h	39′	15″	Emerſ.	2	teleſc.	13	ped. Obſ.	bona.
—	—	—	10	30	55	—	1	—	13	—	bona.
—	29	—	11	18	54	—	2	—	13	—	bona.

Mart.	7 veſp.	6^h	57′	0″	Emerſ.	1	teleſc.	13	ped.	Obſ.	bona.
—	13 —	10	40	59	Immerſ.	3	—	13		—	bona.
—	14 —	8	55	1	Emerſ.	1	—	13		—	bona.
—	30 —	7	19	9	—	1	—	13		—	bona.

Aug.	5 mane	3^h	34′	26″	Immerſ.	1	teleſc.	13	ped.	Obſ.	bona.
—	28 —	3	50	14	—	1	—	13		—	bona.
—	29 —	3	2	25	—	2	—	13		—	bona.

Sept. 20 mane 4^h 7′ 46″ Immerſ. 1 teleſc. 13 ped. Obſ. bona.

VIA ET EPHEMERIS

COMETÆ

VISI PEKINI SINARUM 1748.

Viſus nobis iſthic hoc anno Cometa, ſane quam triſtis & infelix, præterquam enim quod lumine luceret admodum obſcuro & maligno, via inceſſit tam deſerta, cœlo tam parum favente, ut non niſi raro, cum paucis aliquot ſtellulis, nec iſtis ſcio, quam ſuo loco poſitis, comparari potuerit.

Die 26 Aprilis mane ſub horam 3 primum viſus eſt illis, qui ex officio in ſpecula Aſtroptica hujus Regiæ excubant, notatuſque illius locus armilla Zodiacali, rudiuſcule ſcilicet, in ♓ 18°, cum latit. bor. 27°, nempe in pectore Pegaſi ſub ſtellis λ & μ, caput æqualis ſtellæ tertii ordinis, cauda longa quaſi uno gradu.

Sequentibus diebus nulla diligentia obtineri potuit, ut Cometa cum aliqua fixa accuratius compararetur; itaque craſſiuſcule ſolum determinata aliqua illius loca per configurationes cum circumvicinis ſtellis, quæ ut calculi rigorem non ferunt, viam ſaltem, quam Cometa teneret, indigitarent; nimirum:

Die 27 April. mane circa 2^h long. ♓ 21° 20′; lat. bor. 31° 35′.

— 28 April. mane ſub idem tempus long. ♓ 25° 15′; lat. bor. 36° 0′.

— 29 April. mane ſub idem tempus long. ♓ 29° 10′; lat. bor. 40° 0′.

— 30 April. & 1 Maji per nubes nihil viſum.

Die 2 Maji mane comparari demum potuit Cometa cum ſtellula lucidiuſcula media inter 4 ſtellulas, quæ ſunt in flexu catenæ Andromedæ, notatuſque ope micrometri & penduli 2^h 31′ 49″; tempore vero Cometa orientalior ſtellulâ 1′ 50″ penduli, eademque borealior 57′ 8″ circuli maximi.

Die 6 Maji mane comparatus Cometa cum ſtellula, quæ in Catalogo Britannico Flamſtedii ponitur in conſtellatione Caſſiopeæ ordine 6ta per differentias Declinationum, & diſtantias, eo quod ob cœlum non ſatis ſudum, tardum motum & malignum lumen Cometæ tranſitus ejuſdem per horarium etiam inter plura ſecunda penduli definiri non poteſt, nimirum 2^h 3′ 57″ t. v. erat Cometa borealior ſtellâ 44′ 8″, captaque illico diſtantia erat 50′ 50″.

Sequentibus diebus comparatus Cometa cum variis ſtellulis, ſed ignotis ſcilicet, unde nihil de illius loco ſtatui tuto potuit.

Die 15 Maji veſpere circa 9^{nam} (momentum enim temporis per oblivionem notatum non eſt) viſus Cometa inter 2 ſtellulas, a quarum propiore diſtabat in auſtrum (ſitu recto, non inverſo) 11′ 3″, & a remotiore in boream 59′ 58″; videbatur item Cometa orientalior propiore 1′ penduli. Hæ duæ ſtellulæ

ponuntur in Cat. Brit. Flamſt. in conſtellatione Caſſiopeæ ſub finem, & borealior quidem eaque propior in ♊ 4° 49′ 7″ cum lat. bor. 58° 6′ 56″, auſtralior autem eademque remotior in ♊ 3° 28′ 12″ cum latit. bor. 57° 11′ 10″, nempe ad annum illum 1690.

Die 16 Maji comparatus Cometa cum heſternarum borealiore 11^h 1′ 59″ noctis erat orientalior ſtellâ 18′ 29″ penduli, eaque borealior 26′ 4″.

Die 19 Maji comparatus Cometa cum ſtella, quæ in Catalogo fixarum I. Hevelii illo ad annum 1700 ponitur 6[ta] magnitudinis in Cepheo, vocaturque *ſub faſcia ſequens*, eratque 10^h 23′ 39″ noctis Cometa in eadem Aſcenſione recta cum ſtella, certe nunquam notari aliqua potuit temporis differentia inter utriuſque tranſitum per horarium, erat autem Cometa borealior ſtellâ 48′ 14″.

Inde rurſus per ſequentes dies nihil certi de loco Cometæ conſtitutum.

Die 29 Maji viſus Cometa juxta complures ſtellulas, ſed ignotas ſcilicet, moto paulum tubo apparuit majuſcula nempe, quam Hevelius in Catalogo ſuo fixarum illo ad annum 1660 ponit in conſtellatione Camelopardali, vocaturque ſupra tergum ſive in cuſpide pedis ſiniſtri Cephei 5[tæ] magnitudinis; cum autem hujus ſtellæ parallelus longius diſtaret a parallelo Cometæ, quam ut immediate cum illa comparari poſſet, comparatus mediante ſtellula intermedia, notatuſque Cometa 11^h 21′ 25″ noctis orientalior dicta ſtellâ 16′ 13″ penduli, eademque auſtralior 1° 37′ 22″.

Inde quia juxta viam Cometæ nullæ erant, neque futuræ videbantur ſtellæ, cum quibus comparari poſſet, longius eæ ſcilicet petendæ erant, itaque ſequentibus diebus comparatus eſt cum γ Cephei, a cujus parallelo non multum aberat. Ergo teleſcopio probe firmato.

Die 1 Jan.

Die 1 Jun. veſp. 9^h 30′ 53″ γ Cephei ad horarium.
2 — mane 3 24 51 Cometa ad h. bor. ſtellâ γ 26′ 59″.
4 — veſp. 8 28 58 γ Cephei ad horarium.
5 — mane 2 41 9 Cometa ad h. auſtr. ſtellâ γ 8′ 20″.
5 — veſp. 8 23 23 γ Cephei ad horarium.
6 — mane 2 41 17 Cometa ad h. auſtr. ſtellâ γ 20′ ~~12~~″.
7 — veſp. 8 5 3 γ Cephei ad horarium.
8 — mane 2 32 51 Cometa ad h. auſtr. ſtellâ γ 42′ 51″.
8 — veſp. 8 31 59 γ Cephei ad horarium.
9 — mane 3 4 38 Cometa ad h. auſtr. ſtellâ γ 55′ 34″.

Die 12 Junii veſpere, cum jam vix ſpes eſſet videndi ultra Cometæ, vidi illum tamen, parvum jam, obſcurum, veſtigium aliquod Cometæ verius, quam Cometam. Adde clarorem ☾^{æ} & nubilaginem ab eodem colluſtratam, quæ omnia difficilem, dubiam & parum tutam faciunt Obſervationem, præſertim accedente etiam lumine laternæ; nihilominus, ut potui, comparavi eundem cum ſtellula, quam poſtea reperi in una Mappula & Catalogo D. de la Caille in Tomo Memor. Acad. Reg. Scient. Pariſ. 1742. anni, occaſione Cometæ illius anni detectam, & notatam cum Aſcenſione recta ad id temporis 91° 21′, & Decl. bor. 73° 49′, ſignatamque litera A; itaque 9^h 33′ 6″ A ad horarium. Tum
45 23 Cometa ad h. b. ſtellâ 46′ 34″.
Die 13 Jun. veſp. 9^h 13′ 11″ A ad horarium.
29 43 Com. ad h. b. ſtellâ 36′ 15″.

Die 14 Jun. veſp. 9^h $15'$ $44''$ A ad horarium.
36 4 Com. ad h. b. ſtellâ $25'$ $47''$.
Tum circa 9 55 0 Dimenſæ diſtantiæ Cometæ.
a ſtellis I. — $25'$ $9''$.
B — 38 39.
R — 43 3.

Stabat autem juxta ſtellam Q, quæ ſtellæ omnes loco citato notatæ ſunt.

Die 15 & 16 Junii per nubes obſervare nihil licuit.

Die 17 & 18 Junii me domo abſente obſervavit alius ſic:

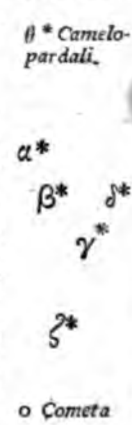
Die 17 Junii veſpere 9^h $26'$ $30''$ A ad horarium.
53 35 R ad horarium.
55 15 Cometa ad hor. in eodem parallelo cum R.

Die 18 Junii veſp. 9^h $52'$ $14''$ A ad horarium.
10 19 21 R ad horarium.
24 57 Cometa ad h. auſtr. ſtellâ A $16'$ $30''$
ſtella R 10 20

Eſt autem ſtellæ R Aſc. recta $98°$ $6\frac{1}{2}'$ & Decl. b. $73°$ $43'$.

Tempora Obſervationum omnia vera ſunt, & ſatis correcta.

Obſervationes porro factæ ſunt tubo 6 pedum & Micrometro Anglico.



Ut ne pars hæc folii vacua abiret, addam conſtellatiunculam, quæ 29 Maji Cometam tubo venanti occurrit, ea eſt, qualis in margine apparet, quarum ſtellarum diſtantiæ erant α a β $12'$ $19''$ β a γ $16'$ $45''$ γ a δ $10'$ $2''$ γ a ζ $19'$ $53''$ δ a ζ $28'$ $17''$ γ a θ, quæ eſt ipſa Camelopardali (*ſupra tergum*) $58'$ $16''$ δ ab eadem $50'$ $3''$. Sed has ipſas diſtantias aliis accuratius dimetiendas relinquo. Eſt autem ſitus hujus aſteriſmi rectus.

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—	——	Sept.	8	—	α ♌	— 354
—	——	Oct.	6	—	σ ♌	— 354
—	——	—	21	—	β ♍	— 355.

Ann.	1748	Nov.	1	♂ cum	η ♍	pag.	357
—	——	Dec.	5	—	m ♍	—	358
—	1749	Jan.	7	—	α ♎	—	359
—	——	Febr.	3	—	β ♏	—	361
—	——	Febr.	14	—	ψ Ophiuchi	—	364
—	——	Maji	19	—	ψ ♐	—	364
—	——	—	27	—	σ ♐	—	366
—	——	Aug.	29	—	φ ♐	—	367
—	——	Sept.	10	—	σ ♐	—	368
—	——	—	26	—	h ♐	—	369
—	——	Nov.	7	—	ι ♑	—	370
—	——	—	12	—	γ ♑	—	371
—	——	—	24	—	ι ♒	—	371
—	——	Dec.	2	—	σ ♒	—	372
—	——	—	15	—	χ ♒	—	373
—	——	—	18	—	φ ♒	—	373
—	1750	Febr.	3	—	ζ ♓	—	375
—	——	—	5	—	ε ♓	—	375
—	——	Mart.	14	—	π ♈	—	375
—	——	—	25	—	δ ♈	—	375
—	——	April.	10	—	A ♉	—	376
—	——	Oct.	15	—	η ♍	—	376
—	——	Nov.	5	—	θ ♍	—	376
—	——	—	24	—	α ♍	—	376
—	——	Dec.	4	—	λ ♍	—	377
—	——	—	18	—	α & ν ♎	—	377
—	1751	Jan.	12	—	β ♏	—	378
—	——	Febr.	11	—	C Ophiuchi	—	379
—	——	—	20	—	* ♐	—	379
—	——	Maji	9	—	γ & δ ♑	—	380.

—	——	Sept.	1	[illegible]	—	[illegible]
Ann.	1751	Jul.	17	♂ cum	✱ ♓	pag. 381
—	——	Dec.	31	—	ε ♓	— 388
—	1752	Febr.	27	—	δ ♈	— 389
—	——	Mart.	16	—	A ♉	— 389
—	——	Maji	13	—	ε ♊	— 389.

§. IV.

VENUS CUM FIXIS.

Ann.	1746	Nov.	5	♀ cum	φ ♐	pag. 390
—	——	—	13	—	σ ♐	— 391
—	——	—	17	—	ψ ♐	— 392
—	——	—	24	—	h ♐	— 392
—	——	Dec.	8	—	✱ ♑	— 393
—	——	—	26	—	υ ♑	— 393
—	1747	Jan.	8	—	β ♑	— 393
—	——	Febr.	25	—	g ♐	— 393
—	——	Mart.	5	—	β ♑	— 394
—	1748	Febr.	7	—	χ ♒	— 395
—	——	—	8	—	φ ♒	— 395
—	——	Mart.	5	—	ζ ♓	— 395
—	——	Maji	3	—	✱ ♊	— 395
—	——	—	13	—	ε ♊	— 396
—	——	—	17	—	η ♊	— 397
—	——	Jun.	8	—	γ ♋	— 397
—	——	Jul.	6	—	α ♌	— 397
—	——	—	10	—	ρ ♌	— 397
—	——	Sept.	26	—	π ♌	— 398.

Ann.	1748	Oct.	10	♀ cum	✱ ♌	pag.	399
—	——	—	16	—	✱ ♌	—	400
—	——	—	17	—	c ♌	—	400
—	——	—	30	—	β ♍	—	401
—	——	Nov.	8	—	η ♍	—	402
—	——	Dec.	4	—	ϰ ♍	—	404
—	——	—	13	—	μ ♎	—	404
—	——	—	23	—	ζ	—	404
—	——	—	30	—	ν ♏	—	405
—	1749	Jan.	12	—	ρ Ophiuchi	—	406
—	——	—	16	—	D Ophiuchi	—	406
—	——	Febr.	1	—	ο ♐	—	407
—	——	Sept.	26	—	λ ♍	—	407
—	——	Oct.	2	—	α ♎	—	407
—	——	Nov.	15	—	λ ♐	—	407
—	——	—	24	—	ψ ♐	—	408
—	——	—	25	—	χ ♐	—	408
—	——	Dec.	19	—	✱ ♒	—	408
—	——	—	29	—	ι ♒	—	409
—	1750	Jan.	4	—	σ ♒	—	409
—	——	—	10	—	λ ♒	—	410
—	——	—	15	—	φ ♒	—	410
—	——	Jul.	9	—	ε ♉	—	411
—	——	—	28	—	ζ ♉	—	411
—	——	Aug.	13	—	δ ♊	—	411
—	——	Sept.	1	—	δ ♋	—	411
—	——	Sept.	17	—	α ♌	—	411
—	——	—	24	—	ρ ♌	—	413
—	——	Oct.	3	—	σ ♌	—	413
—	——	—	16	—	η ♍	—	413
—	1751	April.	26	—	A ♉	—	413.

Ann.	1751	Maji	1	♀ cum	υ & σ ♉	pag.	413
—	——	—	14	—	✱ ♉	—	414
—	——	—	20	—	ε ♊	—	414
—	——	Jun.	17	—	γ ♋	—	415
—	——	Aug.	26	—	α ♍	—	415
—	——	Nov.	20	—	λ ♍	—	416
—	——	Dec.	29	—	γ ♎	—	417
—	1752	Jan.	12	—	χ Ophiuchi	—	417.

§. V.

MERCURIUS CUM FIXIS.

Ann.	1746	Dec.	10	☿ cum	ψ ♐	pag.	418
—	1747	Jan.	16	—	ξ ♐	—	418
—	1748	Sept.	6	—	α ♌	—	419
—	1749	Dec.	10	—	β ♏	—	420
—	1750	Nov.	10	—	κ ♍	—	421.

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